

the Khasi Hills, and I came upon a large number of their prettily constructed nests, and secured the eggs of *S. fuliginosa*, *Cisticola schænicola*, *Prinia Hodgsoni*, &c., the old birds of which I shot at the time. These nests were generally about two feet above the ground, and constructed of fine grasses, the leaves and stems of which were all drawn in together and the leaves often threaded through with the finer fibres.

XVI.—*Contributions towards a Knowledge of the Burmese Flora.*

By S. KURZ.

(Continued from Vol. XLIV, p. 190).

SABIACEÆ.

Conspectus of Genera.

1. *SABIA*. Stamens 4—5, all perfect. Ovary 2—3-lobed. Drupes usually compressed.
2. *MELIOSMA*. Stamens 5, very unequal. Ovary 2—3-celled. Drupes more or less globose.

Sabia, Coleb.

Conspectus of Species.

* *Glabrous. Flowers panicled.*

Flowers about a line across, the pedicels short and thick; leaves coriaceous, *S. limoniacea*. Flowers nearly 4 lin. in diameter, the pedicels capillary and long; leaves membranous, *S. viridissima*.

* * *Branchlets and leaf-nerves beneath tomentose; panicles glabrous, S. tomentosa.*

1. *S. LIMONIACEA*, Wall. Cat. 1000; Hf. Ind. Fl. II. 3.—(*S. sp.* Griff. Not. Dicot. 423. t. 568. f. 2).

HAB. Chittagong.

2. *S. VIRIDISSIMA*, Kurz in Journ. As. Soc. Beng. 1872, 304; Hf. Ind. Fl. II. 3.

HAB. Not unfrequent in the tropical forests of South Andaman, especially along the western coast.—Fl. May.

Meliosma, Bl.

1. *M. SIMPLICIFOLIA*, Bl. in Rumph. III. 197; Miq. Fl. Ind. Bat. I/2 613; Hf. Ind. Fl. II. 5 (*Millingtonia simplicifolia*, Roxb. Corom. Pl. III. t. 254 and Fl. Ind. I. 103; Griff. Not. Dicot. 162. t. 442; *Sabia? floribunda*, Miq. Suppl. Fl. Sum. 521).

HAB. Tropical forests of Tenasserim, from Moulmein southwards; Ava hills; also Chittagong.—Fl. March, Apr.

Dr. Hooker is in error with regard to the geographical distribution of this species. It occurs not only in Malaya, but also in Hindustan (No. 544 of Wight's Distr. being in my opinion the typical plant).

ANACARDIACEÆ.

Conspectus of Genera.

Trib. I. ANACARDIÆ. Ovary 1- very rarely 2-celled.

* *Leaves ternately or pinnately compound (in a very few species not Burmese also simple).*

× Calyx in no way enlarging after flowering.

+ Ovule suspended from near the summit of the cell.

1. ODINA. Petals 4—5, imbricate in bud. Stamens 8—10. Styles 3—4 in the male flowers, the ovary 4—5-parted.

+ + Ovule suspended from a free erect basilar funicle.

2. RHUS. Petals 4—6, imbricate in bud. Stamens 4—10. Styles 3. Leaves compound, very rarely simple. Trees or shrubs.

3. TAPIRIA. Petals 5, imbricate in bud. Stamens 10. Styles in female flowers singly and short, in the males 4—5. Climbers.

× × Calyx-lobes much enlarging and becoming leafy and wing-like.

4. PARISHIA. Flowers 4-, rarely 3-merous. Stamens 4, rarely 3. Style 3-cleft at the summit.

* * *Leaves simple.*

× Petals variously enlarged under the fruit.

5. SWINTONIA. Sepals 5. Stamens 5. Drupe sessile and subtended by the wing-like spreading petals.

6. MELANORRHÆA. Calyx spathaceous, 5-parted. Stamens numerous. Drupe stalked and subtended by the wing-like spreading petals.

× × Petals not enlarging after flowering.

+ Calyx-tube much enlarging and becoming fleshy, either bearing the superior nut or more or less enclosing the same and forming an inferior drupe.

† Nut more or less enclosed in the fleshy calyx. Ovary inferior.

7. DRIMYCARPUS. Petals imbricate in bud. Stamens 5. Style 1, with a capitate stigma.

8. HOLIGARNA. Petals valvate in bud. Stamens 5. Styles 3. Disk annular or obsolete. Petiole furnished with 2—4 tubercles or barb-like excrescences.

† † Nut seated on the much enlarged fleshy calyx-base. Ovary superior.

9. SEMECARPUS. Petals imbricate or valvate in the bud. Stamens 5. Styles 3. Disk rather broadly annular. Petiole without excrescences.

10. ANACARDIUM. Petals imbricate in bud. Stamens 8 to 10, all or few of them anther-bearing. Style filiform. Torus stalk-like.

+ + Calyx unchanged in fruit. (Ovules pendulous from a basal funicle).

11. BUCHANANIA. Calyx 3- to 5-toothed. Stamens 10. Carpels 5 or 6, of which one only fertile. Styles as many, short.

12. *GLUTA*. Calyx spathaceous. Stamens inserted on the stalk-like torus. Style filiform.

13. *BOUEA*. Calyx 3- to 5-parted, valvate in bud. Stamens 3—8, all anther-bearing. Style short. Leaves opposite.

14. *MANGIFERA*. Calyx 4—5-parted. Petals 4—5, the nerve usually thickened. Anther-bearing stamens 1—5. Style filiform. Leaves alternate.

Trib. II. SPONDIÆÆ. Ovary 2—5-celled. Ovules pendulous. Leaves pinnate.

15. *SPONDIAS*. Flowers polygamous. Stamens 8 or 10. Styles 4 or 5, free at the summit.

16. *DRACONTOMELUM*. Flowers hermaphrodite. Stamens 10. Styles 5, thick, connate at their summits and resembling ovaries.

Odina, Roxb.

1. *O. WODIER*, Roxb. Fl. Ind. II. 293; Royle Ill. Him. Pl. t. 31. f. 2; Wight Icon. t. 60; Bedd. Fl. Sylv. t. 123; Hf. Ind. Fl. II. 29.

HAB. Common all over Burma and adjacent islands, especially in the leaf-shedding forests of all kinds.—Fl. Febr. March; Fr. Sept. Octob.

Rhus, L.

Conspectus of Species.

* *Leaves 3-foliolate.*

Glabrous, the leaflets entire, *R. paniculata*.

* * *Leaves unpaired-pinnate.*

Tomentose, the leaflets serrate-toothed, in 4—6 pairs; endocarp smooth and bony, *R. Javanica*.

Petiole very slender and glabrous, the leaflets in 8—12 pairs, incised-serrate; endocarp fibrous, *R. Khasiana*.

1. *R. PANICULATA*, Wall. Cat. 993; Hf. Ind. Fl. II. 10.

HAB. Not uncommon in the eng-forests of Prome; also Ava.—Fl. Sept.; Fr. Jan.

2. *R. JAVANICA*, L. sp. pl. 380; Brand. For. Fl. 119. (*R. semialata*, Murr. Comm. Goett. VI. 27. t. 3; Hf. Ind. Fl. II. 10; *R. Bucki-amela*, Roxb. Fl. Ind. II. 99; Wight Icon. t. 561).

HAB. Not unfrequent in the drier hill-forests and the hill-eng-forests of Martaban, east of Tounghoo, up to 3000 ft. elevation; also Ava.—Fl. Sept., Oct.; Fr. Apr.

3. *R. KHASIANA*, Hf. Ind. Fl. II. 10.

HAB. Chittagong (*teste* Hook. f.).

Tapiria, Juss.

1. *T. HIRSUTA*, Kurz in Journ. As. Soc. Beng. 1870, 75; Hf. Ind. Fl. II. 28. (*R. hirsuta*, Roxb. Fl. Ind. II. 455; Kurz in Journ. As. Soc. Beng. 1870, 75).

HAB. Chittagong, Ava, Khakyen hills (J. Anderson).

Dr. Hooker claims authority for the name, citing the *Genera Plantarum*, where nothing of the kind occurs.

Parishia, Hf.

1. P. INSIGNIS, Hf. in Linn. Trans. XXIII. 169. t. 26 and Ind. Fl. II. 30.

HAB. Frequent in the tropical forests of the Andamans; also in Southern Tenasserim.—Fr. May.

Swintonia, Griff.

Conspectus of Species.

× *Leaves opaque and glaucous beneath.*

Pedicels $\frac{1}{2}$ —1 lin. long; petals hardly a line long; drupes oblong, *S. Schwenckii*.

× × *Leaves one-coloured and glossy.*

Leaves greyish green, the nerves and net-venation conspicuous; pedicels 3—5 lin. long; petals 2 lin. long, *S. Griffithii*.

Similar to the above, but leaves dark-brown, the net-venation obsolete; drupes obovoid, *S. Helferi*.

1. S. SCHWENCKII, Teysm. and Binnend. Cat. Hort. Bog. 230 (line 13 from below); Hf. Ind. Fl. II. 26 (*Astropetalum* sp. 2 Griff. Not. Dicot. 412 teste Hf.).

HAB. Common in the tropical forests of the eastern slopes of the Pegu Yomah and from Martaban down to Tenasserim; also Chittagong.—Fl. Feb.—Apr.; Fr. May.

2. S. GRIFFITHII, Kurz in Journ. As. Soc. Beng. 1870, 75; Hf. Ind. Fl. II. 26. (*Astropetalum* sp. 1. Griff. Not. Dicot. 411 t. 565. f. 2. b—d, teste Hf.).

HAB. Tenasserim, Mergui (Griff. 1124).

3. S. HELFERI, Hf. Ind. Fl. II. 26.

HAB. Tenasserim (Helf. 1122).

Melanorrhoea, Wall.

Conspectus of Species.

Leaves glabrous; panicles usually minutely puberulous; fruit-stalk nearly $1\frac{1}{2}$ in. long, slender, *M. glabra*.

Leaves beneath and panicles pubescent or villous; fruit-stalk short and thick, .. *M. usitata*.

1. M. GLABRA, Wall. Pl. As. rar. III. 50. t. 283; Hf. Ind. Fl. II. 25.

HAB. Tenasserim, in forests from Tavoy southwards.—Fl. Decb.

2. M. USITATA, Wall. Pl. As. rar. I. 9. t. 11-12 and in Journ. As. Soc. Beng. VIII. 70. c. tab.; Sering. in Bull. Bot. II. 38. t. 4; Hf. Ind. Fl. II. 25. (*M.* sp. Griff. Not. Dicot. 409?).

HAB. Common in the open, especially the eng- and hill-eng-forests, but rare in the dry forests, from Prome and Martaban down to Tenasserim, up to 2000 ft. elevation ; also Ava.—Fl. March ; Fr. Apr., May.

Drimycarpus, Hf.

1. *D. RACEMOSUS*, Bth. and Hf. Gen. pl. I. 424 ; Hf. Ind. Fl. II. 36. (*Holigarna racemosa*, Roxb. Fl. Ind. II. 82).

HAB. Not unfrequent in the tropical forests of the eastern slopes of the Pegu Yomah ; also Chittagong.—Fl. Febr., March ; Fr. Jun., July.

N. B.—The genus hardly differs from *Nothopegia* except in the free ovary and in the attachment of the ovules, and stands much in the same relationship to it as *Holigarna albicans* does to *Semecarpus*.

Holigarna, Ham.

Conspectus of Species.

Leaves glabrous or rarely pubescent beneath ; nut entirely enclosed in the obliquely ellipsoid or elliptical perfectly glabrous calyx of an inch length, *H. longifolia*.

Leaves usually pubescent beneath and glabrescent, rarely glabrous ; male flowers nearly twice as large as those of the preceding ; drupe obovoid, tomentose while young, the apex of the nut exposed and forming a convex disk, *H. Grahamii*.

2. *H. GRAHAMII*, Kurz in Journ. As. Soc. Beng. 1872, 205 ; Hf. Ind. Fl. II. 37.

VAR. α . GENUINA. (*Semecarpus Grahamii*, Wight, Icon. t. 235).

VAR. β . HELFERI. (*H. Helferi*, Hf. Ind. Fl. II. 37 ; *H. longifolia*, Hf. Ind. Fl. II. 37 and Roxb. Corom. Pl. III. 76 t. 282. the male plant and Fl. Ind. II. 80 quoad plant. masc. e Chittagong).

HAB. Var. β . Frequent in the tropical forests of the Pegu Yomah and the Martaban hills east of Tounghoo.—Fl. March ; Fl. Apr., May.

The Hindustani tree has the nut much more exserted and broader. But those of my Burmese plants, though not yet ripe, already shew the obovoid development. *H. Helferi*, Hf. Ind. Fl. l. c. from Mergui (Helf. 1133) is in my eyes only a glabrous form of the above. Dr. Hooker assumes that I have mixed up this species and his *Holigarna albicans*. On reference to a list of Burmese plants sent to me by him, I find that, of the numbers 2014, 2016, and 3328, the first, marked by myself as *Holigarna Grahamii*, as also the remaining two, have been referred at Kew to *H. Grahamii*, but of these No. 2016 is my *Semecarpus albescens*, while No. 3328 (marked at Kew as fruits of *H. Grahamii*) is presently not at hand, and the high number would bring it amongst monocotyledons.

Roxburgh carefully separated his two trees (the Chittagong one and the Hindustani one), describing them separately, and remarked that Hamilton had given the generic name to the Hindustani tree. Wight and Arnott are, therefore, quite correct in identifying with Roxburgh's their tree, which Hooker now rechristens *H. Arnottiana*. I possess flowering

and fruiting specimens of Roxburgh's trees in the H. B. C., collected before the destructive cyclone of 1864, which shew that the Chittagong tree of Roxburgh is *H. Helferi*, and that the Hindustani one is the same as Wight's Herb. No. 569 and consequently *H. Arnottiana*, Hf. The fruits are described and figured as much too ovate. If the ripe fruits and the stigmas of the Burmese species should turn out to be different, Hooker's name (*S. Helferi*) would have to be restored.

Semecarpus, L. f.

Conspectus of Species.

A. Nut adnate to the hypocarp, barely exerted. Ovary superior.

Leaves glabrous or pubescent and whitish beneath; nut velvety, the hypocarp sappy, veined, and puberulous, *S. albescens*.

B. Nut seated on the hypocarp.

* Ovary tomentose or pubescent.

× Hypocarp (enlarged base of the calyx) as large or nearly as large as the nut.

Leaves coriaceous, blunt, densely pubescent or tomentose and strongly net-veined beneath; nut not or scarcely oblique, *S. Anacardium*.

Leaves (fullgrown) chartaceous, sharply acuminate, softly pubescent beneath, the net-venation faint; nut very oblique, *S. panduratus*.

× × Hypocarp very small.

Leaves coriaceous, acuminate, quite glabrous or pubescent and very glaucous beneath, the net-venation strong; nut very oblique, $1\frac{1}{2}$ —1 in. across, *S. heterophyllus*.

* * Ovary quite glabrous.

A tree; leaves chartaceous, acuminate, glabrous; panicles quite glabrous; nut an inch broad, *S. subpanduriformis*.

A simple-stemmed shrub with a large subterranean trunk; leaves chartaceous, minutely pubescent beneath and glabrescent; panicles densely puberulous; nut only 3—4 lin. long, *S. subracemosus*.

1. *S. ALBESCENS*, Kurz in Journ. As. Soc. Beng. 1871, 51; Hf. Ind. Fl. II. 35. (*H. albicans*, Hf. Ind. Fl. II. 38 excl. syn; *Semecarpus heterophyllus*, Hf. Ind. Fl. II. 35, non Bl.).

HAB. Not unfrequent in the tropical forests of the Pegu, and the Martaban hills, east of Tounghoo, down to Tenasserim (Helf. 1131).—Fl. Jan. Febr.; Fr. March, Apr.

2. *S. ANACARDIUM*, L. f. Mant. 182; Roxb. Fl. Ind. II. 83 and Corom. Pl. I. t. 12; Wight Icon. t. 558?; Bedd. Fl. Sylv. t. 166; Hf. Ind. Fl. II. 31. (*S. cuneifolia*, Roxb. Fl. Ind. II. 86).

HAB. Chittagong; said to grow also in Burmah, possibly in Ava.—Fl. HS.; Fr. CS.

3. *S. PANDURATUS*, (*S. cuneifolius*, Kurz in Pegu Rep. A. 42, non Roxb.).

HAB. Frequent in the upper mixed forests of the Pegu Yomah and Martaban, up to 2000 ft. elevation; also Chittagong.—Fr. CS.

I formerly identified this species with Roxburgh's *S. cuneifolia*, but Hooker reduces this to *S. Anacardium*, and, I think, correctly so, as it is a Hindustani tree.

4. *S. HETEROPHYLLUS*, Bl. Mus. Bot. I. 187; Miq. Fl. Ind. Bat. I/2. 625.

HAB. Rare in the beach-forests of the Andamans (common on the Nicobars).—Fr. Febr. March.

I (like Hooker) identified flowering male specimens of *Holigarna albicans* with this, but *S. heterophyllus* has flowers more than twice the size and very stout panicles.

5. *S. SUBPANDURIFORMIS*, Wall. Cat. 987; Fl. Ind. Fl. II. 35. (*S. acuminatus*, Wall. ap. Voigt. Cat. Suburb. Calc. 171; Kurz in Journ. As. Soc. Beng. 1870, 75, non Thwait.).

HAB. Frequent in the upper mixed forests of the lower sandstone hills of Arracan; also Chittagong.—Fr. Octob.

6. *S. SUBRACEMOSUS*, Kurz in Journ. As. Soc. Beng. 1872, 304; Hf. Ind. Fl. II. 35. (*S. microcarpus*, Wall. Cat. 989?; Hf. Ind. Fl. l. c. 31?).

HAB. Prome District (Col. Eyre).

Anacardium, Roxb.

1. *A. OCCIDENTALE*, L. sp. pl. 548; Roxb. Fl. Ind. II. 312; Griff. Not. Dicot. 408, t. 565, fig. e. f.; Bedd. Fl. Sylv. t. 163; Hf. Ind. Fl. II. 20.

HAB. In the beach-forests of Chittagong, Tenasserim, and the Andamans; often cultivated in villages.—Fl. Decb.

Gluta, L.

Conspectus of Species.

Leaves coriaceous, the petiole not above 6 lin. long, stout and marginate; panicles and calyx puberulous, *G. Tavoyana*.

Leaves chartaceous, the petiole long and slender, not or only at the apex marginate; panicles and flowers perfectly glabrous, *G. elegans*.

1. *G. TAVOYANA*, Hf. Ind. Fl. II. 22 (*Syndesmis Tavoyana*, Wall. Cat. 1004; *G. Renghas*, Kurz in Pegu Rep. A. 41.)

HAB. Tenasserim, from Tavoy southwards.

I fear nothing but a variety of Linné's *G. Renghas*.

2. *G. ELEGANS*, Kurz in Pegu Rep. A. 41; Hf. Ind. Fl. II. 22 (*Syndesmis elegans*, Wall. in Roxb. Fl. Ind. II. 315). var. *HELPERI*, Hf. l. c.

HAB. Tenasserim. (Helf. 1118. 1117.)

As pointed out by Hooker, more probably a distinct species, but the material at hand is unsatisfactory.

G. longipetiolata, Kurz in Pegu Rep. l. c. is a tree, common on the shores of the Andamans, with large green long-petioled leaves unlike those of any other species. Flowers and fruits unknown.

Buchanania, Roxb.*Conspectus of Species.*

* *Leaves and panicles tomentose or pubescent.*

O Leaves tomentose or pubescent on both sides, large.

Panicles stout and stiff; flowers 2 lin. across, sessile and crowded,.....*B. latifolia*.

Panicles slender, grey pubescent; flowers barely a line in diameter, pedicelled and lax,

.....*B. laxiflora*.

O O Leaves small, puberulous beneath, glossy above, retuse, the petiole

1—2 lin. long,.....*B. Siamensis*.

* * *Leaves glabrous and more or less glossy, usually fuscous in drying; panicles glabrous or puberulous.*

× Panicles rusty puberulous.

Petiole $\frac{1}{2}$ in. long; flowers a line across; flowers very shortly pedicelled, crowded,

.....*B. glabra*.

× × Panicles etc. quite glabrous; flowers pedicelled.

Leaves equally decurrent at the base; pedicels very slender; petals a line long, reflexed; panicles longer than the leaves,*B. arborescens*.

Leaves equally decurrent at the base; pedicels short and stout; petals 2—3 lin. long, erect; panicles as long or longer than the leaves,.....*B. acuminata*.

Leaves very unequally decurrent at the base, large; pedicels very slender; petals a line long, reflexed; panicles crowded, shorter than the leaves,.....*B. lancifolia*.

1. *B. LATIFOLIA*, Roxb. Fl. Ind. II. 385; Bedd. Fl. Sylv. t. 165; Hf. Ind. Fl. II. 23.

HAB. Common in the open and dry forests, especially the eng-forests, all over Burma, from Ava and Martaban down to Tenasserim.—Fl. March; Fr. Apr.

2. *B. LAXIFLORA*, Kurz in Journ. As. Soc. Beng. 1872, 304; Hf. Ind. Fl. II. 24.

HAB. Martaban hills, along limestone rocks along the Beeling river (Dr. Brandis); Pegu, above Rangoon (Cleghorn).—Fl. Jan. Febr.

Habit of the preceding species.

3. *B. GLABRA*, Wall. Cat. 984; Hf. Ind. Fl. II. 23.

HAB. Upper-Tenasserim, Moulmein (Wall.), *teste* Hf.

4. *B. ARBORESCENS*, Bl. Mus. Bot. I. 183; Miq. Fl. Ind. Bat. I/2. 636 (*Coniogeton arborescens*, Bl. Bydr. 1156; *B. petiolaris*, Miq. l. c. 637; *B. lucida*, Bl. Mus. Bot. I. 184; Hf. Ind. Fl. II. 23; Miq. in Ann. Mus. Lugd. Bat. IV. 117; *B. subobovata*, Griff. Not. IV. 413; *B. Bancana*, Miq. Suppl. Fl. Sum. 205 and 523).

HAB. Tenasserim (*teste* Hf.).

5. *B. ACUMINATA*, Turcz. in Bull. Mosc. 1858. 472.; Hf. Ind. Fl. II. 24 excl. syn. Bl. (*Sorindeia acuminata*, Wall. in Voigt. Cat. Hort. Calc. 150).

HAB. In the moister forests of the Andaman islands (a large-leaved form); Upper Tenasserim, Moulmein (Lobb.) *teste* Hf.

6. *B. LANCIFOLIA*, Roxb. Fl. Ind. II. 386; Hf. Ind. Fl. II. 24.

HAB. Chittagong ; Arracan (Dr. Schlich) ; Tenasserim (Helf. 1115, a bad specimen).—Fl. CS.

7. B. SIAMENSIS, Miq. in Ann. Mus. Lugd. Bat. IV. 118.

HAB. Adjoining Siamese province of Radbooree (Teysmann).—Fr. Apr. May.

Bouea, Meisn.

Conspectus of Species.

Panicles small, sessile or nearly so, quite glabrous ; petals $\frac{1}{2}$ lin. long ; drupes orange or orange-yellow, *B. oppositifolia*.

Panicles large, long-peduncled, puberulous ; petals a line long or longer ; drupes bluish black, *B. Burmanica*.

1. B. OPPOSITIFOLIA, Meisn. MS. ap. Walp. Rep. I. 556 ; Miq. Fl. Ind. Bat. I/2. 635 (*Mangifera oppositifolia*, Roxb. Fl. Ind. I. 640).

HAB. Not uncommon in the tropical forests of Martaban down to Tenasserim and the Andamans ; also much cultivated in villages.—Fl. Jan. Febr. ; Fr. Apr. May.

2. B. BURMANICA, Griff. in Journ. As. Soc. Beng. 1854. 634 (*B. Brandisiana*, Kurz in Journ. As. Soc. Beng. 1871. 50 and 1873. 66.)

HAB. Upper Tenasserim, Thounggyeen (Dr. Brandis).—Fl. March.

Mangifera, L.

Conspectus of Species.

* *Petals and stamens free, the former inserted at the base of the cushion-like or cupular disk.*

× Panicles and calyx more or less puberulous or pubescent, rarely almost glabrous. Fertile stamen 1.

Panicles and the 3—6 lin. long pedicels very slender, glabrescent or almost glabrous ; petals linear-subulate ; the lateral nerves very thin, *M. longipes*.

Panicles stout ; pedicels short and thick ; petals yellow, streaked red, hardly 2 lin. long ; disk fleshy, 5-lobed ; drupes obtuse, 3—4 in. long ; net-venation lax and thin, *M. Indica*.

Panicles stout ; petals hardly 2 lin. long ; disk 5-lobed ; drupes 1—2 in. long, blunt ; net-venation minute and strongly prominent on both sides, *M. caloneura*.

× × Panicles and calyx perfectly glabrous.

Panicles stout ; pedicels 3—4 lin. long, thick ; petals white, about 3 lin. long ; disk cup-shaped ; drupes acuminate, *M. sylvatica*.

* * *Petals and stamens connate with the base of the stalk-like torus, rarely the latter wanting altogether.*

Leaves very coriaceous and shining, almost polished beneath ; flesh of drupe soapy, *M. foetida*.

1. M. LONGIPES, Griff. Not. Dicot. 419 ; Hf. Ind. Fl. II. 15.

HAB. Frequent in the swamp forests and around jungle-swamps of the Irrawaddi alluvium ; also Tenasserim.—Fl. CS.

2. M. INDICA, L. sp. pl. 290 ; Roxb. Fl. Ind. I. 641 ; Bot. Mag. t. 4510 ; Hf. Ind. Fl. II. 13.

HAB. Not unfrequent in the tropical and lower mixed forests, from Arracan and Pegu down to Tenasserim and the Andamans; generally cultivated in several varieties in all villages.—Fl. Febr., March; Fr. May to July.

3. *M. CALONEURA*, Kurz in Journ. As. Soc. Beng. 1873, 66; Hf. Ind. Fl. II. 14.

HAB. Frequent in the low and lower mixed forests of the eastern and southern slopes of the Pegu Yomah.—Fl. Decb. Jan.; Fr. May.

4. *M. SILVATICA*, Roxb. Fl. Ind. I. 644; Hf. Ind. Fl. II. 15.

HAB. Rare in the tropical forests of the Martaban hills.

Most of the wild mangoes I collected in Burmah having been taken from saplings only, I cannot say whether they belong to this or to the preceding species. The species is frequent in the Sikkim Himalaya and the Khasi hills.

5. *M. FÆTIDA*, Lour. Fl. Coch. 199; Roxb. Fl. Ind. ed. Wall. II. 440; Griff. Not. Dicot. 419; Hf. Ind. Fl. II. 18.

HAB. Cultivated in South Tenasserim (*teste* Rev. Mason).

N. B. No. 2020 and 2021 referred at Kew (not by me) to *Mangifera* (Ind. Fl. II. 20) are both referable to *Swintonia Schwenckii*.

Spondias, L.

1. *S. MANGIFERA*, Willd. sp. pl. II. 751; Roxb. Fl. Ind. II. 451; Wight Ill. t. 76; Bedd. Fl. Sylv. t. 169; Hf. Ind. Fl. II. 42. (*S. pinata*, Kurz in Pegu Rep. A. 44).

HAB. Frequent in the mixed forests, especially the upper ones, all over Burmah, from Chittagong, Prome, and Martaban down to Tenasserim, up to 3000 ft. elevation; also Ava.—Fl. March, Apr.; Fr. CS.

There are two varieties of this, the one with large leaflets and drupes as big as a duck's egg, the other with these parts only half the size, but differing in no other respects.

Doubtful Species.

S. ? macrophylla, Wall. Cat. 8480; Hf. Ind. Fl. II. 43.

HAB. Ava, Taong-tong (*teste* Hf.)

Dracontomelum, Bl.

1. *D. MANGIFERUM*, Bl. Mus. Bot. I. 231. t. 42; Hf. Ind. Fl. II. 43.—(*D. sylvestre*, Bl. Mus. Bot. I. 231; Kurz in Pegu Rep. A. 44; *D. puberulum*, Miq. Suppl. Fl. Sum. 524).

HAB. Frequent in the tropical forests of the Andamans.—Fr. Apr. May.

CONNARACEÆ.

Conspectus of Genera.

Trib. I. CONNAREÆ. Calyx imbricate. Seeds without albumen.

ROUREA. Sepals enlarged in fruit, imbricately-cupular. Follicle sessile. Seeds arillate.

ROUREOPSIS. Sepals enlarging, more or less spreading in fruit; follicle sessile.

CONNARUS. Sepals not enlarging or deciduous. Follicle stalked. Seeds arillate.

Trib. II. CNESTIDEÆ. Calyx valvate, 5-parted. Seeds with or without albumen.

× Seeds with albumen.

CNESTIS. Carpels 5—7, sessile, pilose or hispid within. Leaves unpaired pinnate.

× × Seeds without albumen.

TÆNIOCHLÆNA. Sepals reflexed in fruit. Carpels 5, sessile, glabrous within. Leaves unpaired pinnate.

ELLIPANTHUS. Sepals erect. Carpels solitary, tomentose or velvety within. Leaves 1-foliolate.

Rourea, Aubl.

Conspectus of Species.

* *All parts quite glabrous. Leaflets in few (not above 6) pairs, acuminate.*

Leaflets $1\frac{1}{2}$ —2 in. long, the rachis and petiolules very slender, *R. pulchella*.

Leaflets 5—3 in. long, the rachis and petiolules stout, *R. commutata*.

* * *Inflorescence, leaf-rachis, and often the leaflets beneath puberulous or shortly pilose. Leaflets in numerous pairs, small, usually retuse or rounded.*

× Sepals erect and cupular-closing.

Leaflets pubescent or pilose beneath, *R. villosa*.

Leaflets glabrous on both sides, *R. Wallichiana*.

× × Sepals spreading.

Leaflets obliquely ovate or obovate, 2-lobed at the summit, *R. stenopetala*.

1. *R. PULCHELLA*, Planch. in Linn. XXIII. 419; Miq. Fl. Ind. Bot. I/2. 658; Hf. Ind. Fl. II. 48.

HAB. Tenasserim, Mergui (Griff.).

2. *R. COMMUTATA*, Planch. in Linn. XXIII. 420; Hf. Ind. Fl. II. 47 (*Cnestis monadelpha*, Roxb. Fl. Ind. II. 454).

Var. β . *PLURIJUGA*, leaves not rarely abruptly pinnate, leaflets in 4—6 rarely in 3 pairs.

HAB. Not unfrequent in the tropical forests of Martaban and Tenasserim down to the Andamans; also Chittagong; var. β . Andamans.—Fl. May, June.

3. *R. VILLOSA*, Planch. in Linn. XXIII. 422; Hf. Ind. Fl. II. 48.

HAB. Apparently frequent in Tenasserim, from Moulmein southwards.—Fr. March.

4. *R. WALLICHIANA*, Planch. in Linn. XXIII. 421; Hf. Ind. Fl. II. 49.

HAB. Tenasserim (*teste* Hf.).

Unknown to me. Hooker points out no structural differences from the preceding, of which it seems to be a glabrescent form only.

5. *R. STENOPETALA*, Hf. Ind. Fl. II. 49. (*Cnestis steriopetala*, Griff. Not. Dicot. 433. t. 611 f. 2).

HAB. Tenasserim, Mergui (Griff.) *teste* Hf.

Unknown to me; the narrow petals and spreading sepals point to *Roureopsis*.

Connarus, L.

Conspectus of Species.

* *Follicles perfectly glabrous and smooth on the walls inside.*

Rachis of leaves and midrib beneath pubescent, or almost glabrous, the nervation thin, much net-veined especially while young, conspicuously bullate-dotted on the areoles; follicles sessile, $\frac{1}{2}$ in. long, *C. stictophyllus*.

* * *Follicles more or less pubescent or velvety within.*

× Petioles and leaflets beneath, or the nerves only, pubescent.

Leaflets pubescent on the midrib beneath, nerves very slender, in 5 pairs, follicles tomentose, *C. semidecandrus*.

Leaflets finely rusty pubescent beneath, the nerves very indistinct, *C. Griffithii*.

× × Leaflets perfectly glabrous. Follicles stalked.

+ Follicles chartaceous or thin coriaceous, deeply striate.

A large tree; follicles about an in. long or somewhat longer, *C. paniculatus*.

Climber; follicles about an in. long or somewhat longer, *C. gibbosus*.

Apparently as preceding, but the follicles nearly cylindrical, *C. latifolius*.

+ + Follicles woody.

Leaflets thick coriaceous, large; follicles about 2 in. long, *C. grandis*.

1. *C. STICTOPHYLLUS*, Kurz MS.

HAB. Tenasserim; also adjoining Siamese province of Radbooree (Teysmann).—Fl. HS.

2. *C. SEMIDECANDRUS*, Jack in Mal. Misc. 2. VII. 39; Hf. Ind. Fl. II. 52.

HAB. Tenasserim, Mergui (Griff.) *teste* Hf.—Fl. HS.

3. *C. GRIFFITHII*, Hf. Ind. Fl. II. 52.

HAB. Tenasserim, Mergui (Griff.) *teste* Hf.

4. *C. PANICULATUS*, Roxb. Fl. Ind. III. 139; Hf. Ind. Fl. II. 52?

HAB. Chittagong (Roxb.).

Hooker calls this a climber, while Roxburgh states that it is a large timber-tree.

5. *C. GIBBOSUS*, Wall. Cat. 8541; Hf. Ind. Fl. II. 52.

HAB. Common along the outskirts of tropical forests, deserted toung-yas, along river-banks, etc., all over Burma, from Chittagong, Pegu, and Martaban to Tenasserim, up to 2000 feet elevation.—Fl. Apr. May; Fr. May, June.

6. *C. LATIFOLIUS*, Wall. Cat. 8537; Hf. Ind. Fl. II. 53.

HAB. Tenasserim, Moulmein and Tavoy (*teste* Hf.).

Unknown to me, and apparently not sharply distinguished from the preceding.

7. *C. GRANDIS*, Jack in Mal. Misc. II. 7. 40; Planch. in Linn. XXIII. 429; Hf. Ind. Fl. II. 53.

HAB. Tenasserim or Andamans (Helf.) *teste* Hf.

Cnestis, Juss.

Conspectus of Species.

A scandent shrub; sepals a line long; leaflets usually opposite, *C. platantha*.
Erect small tree or shrub; sepals 2 lin. long; flowers long-pedicelled; leaflets often
alternate, *C. ramiflora*.

1. *C. PLATANTHA*, Griff. Not. Dicot. 434 (*C. foliosa*, Planch. MS. *C. flaminea*, Griff. l. c. 433. t. 608. f. 2).

HAB. Frequent in all forests, especially the tropical and moister upper-mixed ones, all over the Pegu Yomah, and from Martaban down to Tenasserim, up to 3000 feet elevation.—Fl. RS.; Fr. HS.

2. *C. RAMIFLORA*, Griff. Not. IV. 432 (*Rourea dasyphylla*, Miq. Suppl. Fl. Sum. 528; *C. ignea*, Planch. MS.).

HAB. Rather frequent in the tropical forests of the Andamans.

Ellipanthus, Hf.

Conspectus of Species.

* *Leaves glabrous or nearly so. Follicles glabrous within.*

Leaves and petiole glabrous, the former 4—6 in. long, nerves beneath very slender,
.. *E. calophyllus*.

Petiole and midrib beneath puberulous; leaves 2—3 in. long, nerves strong beneath,
.. *E. Helferi*.

* * *Leaves pubescent or tomentose beneath. Follicles glabrous within.*

Nerves beneath very slender; follicles $1\frac{1}{2}$ —2 in. long, *E. tomentosus*.

1. *E. CALOPHYLLUS*, Kurz in Journ. As. Soc. Beng. 1872, 305; Hf. Ind. Fl. II. 55.

HAB. Frequent in the tropical forests of the Andamans.—Fl. May; Fr. June, July.

2. *E. HELFERI*, Hf. Ind. Fl. II. 55.

HAB. Tenasserim or Andamans (Helf.).

3. *E. TOMENTOSUS*, Kurz in Journ. As. Soc. Beng. 1870, 305; Hf. Ind. Fl. II. 56.

HAB. In the tropical forests of the southern slopes of the Pegu Yomah above Rangoon; Tenasserim.—Fl. Jan.; Fr. March, Apr.

LEGUMINOSÆ.

Conspectus of Genera.

Subord. I. Eu-Leguminosæ. Flowers more or less irregular, rarely almost regular and in this case the standard-petal slightly larger and

innermost in bud. Petals imbricate in bud. Stamens definite, variously connate or rarely free.

Trib. 1. PAPILIONACEÆ. Uppermost petal (standard) outside in bud.

* *Stamens free from the base or slightly connate at the very base only.*

Subtr. 1. SOPHOREÆ. Leaves pinnately 1—many-foliolate. Pods indehiscent or dehiscent.

* *Leaves simple.*

DALHOUSIEA. Bracts, and bractlets large, opposite, persistent. Calyx-teeth very short. Pods compressed.

* * *Leaves pinnate. Bracts and bractlets small, deciduous.*

SOPHORA. Pods moniliform, terete or winged, usually indehiscent. Arillus none. Leaves without stipulets.

ORMOSIA. Pods more or less woody, turgid, dehiscent. Arillus none, but the seeds usually bright red-coloured, with a black hilum. Leaves without stipulets.

ARILLARIA. Pods fleshy-coriaceous, short, dehiscent; arillus crimson, enveloping the whole seeds. Leaves with stipulets.

Subtr. 2. PODALYRIÆ. Leaves simple or digitately compound. Otherwise as in preceding. (Chiefly Australian plants).

* * *Stamens variously united into a tube, or into a slit sheath or into two separate sheaths with the vexillar stamen free or adnate.*

+ Pods jointed, dehiscent or not, very rarely obsoletely or not jointed, in which case the valves are usually marked with transverse veins or lines (in a few genera the pods consist of a single joint).

Subtr. 3. HEDYSARÆ. Characters as above. Leaves often pinnately 3—1-foliolate, rarely pinnate.

* *Stamens united into a single slit sheath, the vexillary 10th one free.*

× Ovules solitary. Pods 1-jointed.

LEPTODESMIA. Pods dehiscent. Flowers in terminal, head-like racemes.

LESPEDEZA. Pods indehiscent. Flowers clustered or in racemes, usually axillary.

× × Ovules 2 or more. Pods 2- or more-, rarely (by abortion) 1-jointed.

O Pods not jointed, compressed or inflated.

† Pod inflated like that of *Crotolaria*.

RYCNOPODA. Herbs with pinnately 3-foliolate leaves; flowers in racemes.

† † Pod compressed.

OUGEINIA. Pod constricted between the joints. Flowers fascicled from the old wood. Stamens dimorphous, the alternate ones gland-bearing. Trees.

PSEUDARTHRIA. Pods flat with straight sutures. Flowers in terminal racemes. Herbs.

O O Pods distinctly jointed.

† Pod-joints in a line, not folded up.

DESMODIUM. Pod-joints flat or slightly convex, dehiscent or indehiscent. Racemes terminal or axillary and terminal. Leaves 3- rarely 1-foliolate.

ALYSICARPUS. Pod-joints more or less turgid. Calyx deeply divided and almost glumaceous. Leaves often 1-foliolate.

MECOPUS. Pod 2-jointed, between uncinnate-subulate bracts, the pedicels abruptly deflexed from the tips. Leaves simple.

† † Pod-joints folded one upon the other.

LOUREA. Calyx enlarged in fruit. Flowers in racemes. Leaves 1—3-foliolate.

URARIA. Calyx not changed in fruit. Flowers in racemes. Leaves 3—1-foliolate, or pinnate.

* * *Stamens 10, all united into a single tube or into 2 separate sheaths of 5 each.*

× Stamens all united into a single complete tube. Anthers dimorphous.

ARACHIS. Calyx-tube filiform, the 4 upper-lobes united, the lowermost thin and free. Petals and stamens inserted at the mouth of the calyx-tube. Pod ripening under the soil. Leaves abruptly pinnate.

ZORNIA. Calyx-tube short. Pod 2—6-jointed, muricate. Herbs, the leaves digitately 2—4-foliolate.

× × Stamens united into 2 separate sheaths of 5 each.

+ Pod twisted within the calyx.

SMITHIA. Calyx 2-parted. Herbs with abruptly pinnate leaves, the rachis ending in a bristle.

+ + Pod straight.

GEISSASPIS. Calyx deeply 2-lipped, the upper lip entire. Herbs with abruptly pinnate leaves. Pods 1—2-jointed, indehiscent.

ÆSCHYNOMENE. Calyx 2-lipped. Herbs, rarely undershrubs, with unpaired-pinnate leaves. Pods many-jointed.

ORMOCARPUM. Calyx 5-toothed. Pod-joints longitudinally striate or ribbed. Shrubs with unpaired-pinnate leaves.

+ + Pods not jointed, very rarely 1-seeded.

Subtr. 4. VICIEÆ. Petiole terminating in a bristle or tendril. Leaves abruptly pinnate.

* *Stamens 10, united into a single slit sheath with the tenth vexillary one free.*

× Leaflets toothed. Wings free from the staminal tube.

CICER. Wings free. Style not bearded at the apex. Pod inflated. Funicle filiform. Erect herbs.

× × Leaflets entire. Wings more or less adhering to the staminal tube.

VICIA. Staminal tube oblique at the mouth. Style pubescent, or bearded at the apex. Ovules usually numerous. Erect or twining herbs.

LENS. Staminal tube oblique at the mouth. Style filiform. Ovules usually 2. Erect herbs.

LATHYRUS. Staminal tube truncate at the mouth. Style flat, or dilated at the apex. Pods more or less compressed. Erect herbs.

PISUM. As preceding but style triquetrous and dilated upwards. Pods turgid.

* * *Stamens only 9, all united into a single slit sheath.*

ABRUS. Style not bearded. Pods compressed, chambered within. Climbing undershrubs.

Subtr. 5. PHASEOLEÆ. Petiole without tendril. Leaves usually pinnately 3-foliolate, very rarely unpaired pinnate.

* *Leaflets not resinous-dotted beneath.*

× Stamens united into a slit sheath with the 10th vexillary one free (or rarely shortly adnate.)

+ Nodes of the inflorescence not tumid. Stipules and bracts conspicuous, persistent.

CLITORIA. Petals very unequal in length, the standard narrowed at the base, nude at the apex. Calyx-tube cylindrical, longer than the lobes. Erect or climbing herbs or undershrubs.

SHUTERIA. Style filiform. Calyx-teeth distinct, the 2 upper ones connate. Anthers conform. Bracts persistent, striate.

DUMASIA. Style dilated at the middle. Calyx-tube cylindrical, obliquely truncate at the mouth.

+ + Nodes of the inflorescence tumid.

† Stigma terminal, capitate. Style beardless.

O Anthers all conform.

§ Twining or creeping herbs. Petals equally long.

GALACTIA. Calyx 4-toothed (the 2 upper teeth being united into one). Pod 2-valved.

GRONA. Calyx 5-toothed, the 2 upper teeth free. Pod linear, 2-valved. Seeds strophiolate.

§ § Trees or woody climbers or shrubs.

BUTEA. Petals equally long. The 2 upper calyx-teeth free. Pod indehiscent, 1-seeded at the apex, the sterile basal part much dilated and flat.

ERYTHRINA. Petals very unequal, the standard exceeding the keel.

O O Anthers dimorphous.

MUCUNA. Petals very unequal, the keel exceeding the standard. Woody climbers or twining undershrubs.

† † Style bearded.

O Stigma oblique.

§ Free part of filaments straight, alternately shorter.
Twining herbs.

PACHYRRHIZUS. Keel not spirally twisted. Style flat upwards, the stigma almost globose on the inner face. Pod transversely lined between the seeds.

VIGNA. Keel not spirally twisted, blunt or arcuate-beaked. Style filiform.

§ § Free part of filaments once or rarely twice spirally twisted.

PHASEOLUS. Keel spiral. Style filiform. The 2 upper calyx-teeth, or all, shorter than the tube. Hilum oblong or shortly orbicular. Twining or rarely almost erect herbs.

O O Stigma terminal. Free part of filaments straight.

DOLICHOS. Keel not spirally twisted. Style filiform, minutely penicillate around the minute stigma. Twining or rarely suberect herbs.

LABLAB. As preceding, but style thickened upwards, bearded down the inner edge. Twining or suberect herbs.

× × Stamens all united into a complete tube.

+ Nodes of inflorescence tumid.

CANAVALIA. Upper-lip of calyx projecting. Style beardless or rarely bearded. Pod indehiscent or late-dehiscing, the upper suture thickened or narrowly 2-winged.

PSOPHOCARPUS. Pod 4-cornered, longitudinally 4-winged. Stigma almost globose, densely penicellate-villous.

DIOCLEA. Upper teeth of calyx not projecting. Pod oblong, turgid, indehiscent, the upper suture thickened or 2-winged. Anthers dimorphous.

PUERARIA. Upper teeth of calyx not projecting. Pod linear, flattish, readily dehiscing, many-seeded.

+ + Nodes of inflorescence not tumid. Stipules and bracts minute, deciduous.

TERAMNUS. Calyx-teeth free. Alternate anthers abortive.

GLYCINE. Calyx-teeth free, the 2 upper ones more or less connate. Anthers all fertile and conform.

* * *Leaflets more or less conspicuously resinose-dotted beneath.*

+ Ovules 3 or more.

DUNBARIA. Pods plain or slightly turgid, often falcate, not depressed between the obsolete strophioled seeds.

ATYLOSIA. Pod transversely depressed or lined between the seeds. Arillus rather large, grooved.

CAJANUS. Pod transversely depressed between the seeds. Arillus or strophiole none.

+ + Ovules 1 or 2.

× Funicle arising from the centre of the hilum.

CYLISTA. Calyx accrescent and leafy, scarious-membranous, the lowermost lobe largest.

RHYNCHOSIA. Calyx not accrescent in fruit. Pods compressed. Leaves pinnately 3-foliolate.

FLEMINGIA. Calyx not accrescent in fruit. Pod turgid. Leaves digitately 3-foliolate.

× × Funicle arising from the extremity of the linear hilum.

ERIOSEMA. Pod transversely depressed. Erect herbs with axillary flowers. Leaves (in Ind. sp.) simple.

Subtrib. 6. GENISTEÆ. Stamens usually monadelphous, the filaments not dilated upwards; anthers usually alternately longer and basifix or nearly so, the others smaller and versatile. Leaves digitate. Pod often inflated.

* *Anthers dimorphous. Keel-petals firmly cohering.*

CROTALARIA. Keel beaked. Pod turgid or inflated. Flowers in terminal or leaf-opposite racemes. Herbs or undershrubs with simple or digitately 3–7-foliolate leaves.

PRIOTROPIS. As preceding, but pods much compressed. Leaves digitately 3-foliolate.

* * *Anthers uniform. Keel-petal hardly cohering.*

ROTHIA. Anthers small. Pods follicle-like dehiscing. Herbs.

Subtrib. 7. LOTEÆ. Stamens usually diadelphous (9 + 1), the filaments dilated upwards. Leaves digitately or pinnately compound.

* *Leaflets quite entire (Lotæ).*

LOTUS. Petals adnate to the staminal tube. Keel beaked. Pod 2-valved. Leaves pinnately 5-foliolate.

PAROCHETUS. Petals deciduous, free from the staminal tube, the keel rather acute. Pod 2-valved. Flowers solitary or in poor umbels. Leaves digitately 3-foliolate.

* * *Veins of leaflets usually produced into marginal toothlets. Leaves pinnately 3-foliolate. Keel-petal blunt.*

× Pod spirally falcate or circinate.

MEDICAGO.

× × Pod straight or nearly so.

TRIGONELLA. Pod elongate, straight, erect or recurved, indehiscent or dehiscing along one or both sutures.

MELILOTUS. Pod small, rotundate or oblong, more or less indehiscent.

Subtrib. 8. GALEGEÆ. Stamens 10, variously connate, the filaments filiform upwards; anthers usually versatile. Pods dehiscant or indehiscent. Leaves unpaired pinnate, rarely simple.

* *Pods dehiscant (very rarely indehiscent and in this case small and 1-seeded) (Eu-Galegeæ).*

× Pods distinctly transversely chambered within, dehiscant, or 1-seeded and indehiscent.

† Pods 1-seeded and indehiscent. Hairs basifix.

PSORALEA. Anthers blunt. Leaves simple or 3-foliate, the leaflets gland-dotted. Seed adhering to the pericarp.

† † Pods several-seeded and dehiscant.

O Anthers apiculate. Hairs fixed by the centre.

CYAMOPSIS. Stamens monadelphously united into a tube. Leaflets entire or toothed.

INDIGOFERA. Stamens diadelphous (9 + 1). Leaves pinnately many—1-foliate.

O O Anthers blunt. Hairs basifix.

SESBANIA. Style not bearded, the stigma minute. Flowers in axillary racemes. Leaves pinnate. Herbs or undershrubs, rarely trees.

× × Pods not chambered within, many-seeded.

TEPHROSIA. Vexillary stamen only at the middle adnate to the staminal tube, free at the base. Pods thin coriaceous. Herbs, undershrubs or rarely shrubs. Leaves pinnately many—1-foliate.

MILLETTIA. Filaments diadelphous (9 + 1), filiform. Pod woody or coriaceous. Trees or woody climbers. Leaves pinnate.

* * *Pods indehiscent, usually many or several-seeded. (Dalbergiæ).*

× Pods wingless.

* PONGAMIA. Filaments usually long. Pod more or less flattish, firmly fleshy coriaceous. Trees. Leaflets opposite.

DREPANOCARPUS. Filaments alternately shorter. Pods reniform or crescent-shaped, coriaceous or drupaceous, 1—3-seeded. Trees or woody climbers. Fl. white or purple. Leaflets alternate.

× × Pods winged along the one or both sutures.

DALBERGIA. Filaments alternately shorter. Pods oblong to linear, all round extended into a chartaceous or coriaceous wing. Trees or woody climbers. Flowers from white to rose and purple. Leaflets alternate.

PTEROCARPUS. Filaments equally long. Pods almost orbicular or broadly oblong, seed-bearing in the centre and surrounded by a broad complete wing. Trees. Flowers yellow. Leaflets alternate.

DERRIS. Filaments alternately shorter. Pod flat, thin or coriaceous, winged along one or both sutures. Trees or woody climbers. Leaflets opposite.

Trib. 2. CÆSALPINIÆ. Of the imbricate or valvate petals the uppermost one (standard) innermost in bud. Stamens free or connate.

* *Anthers erect and basifix, rarely almost versatile, usually opening by 2 apical pores, rarely opening in longitudinal slits.*

Subtrib. 1. CASSIEÆ. Leaves unpairedly or abruptly pinnate. Sepals free to the disk, usually imbricate. Ovary or ovary-stalk free.

* *Petals all developed.*

CASSIA. Sepals imbricate. Stamens 5—10. Leaves abruptly pinnate. Trees, shrubs or herbs.

* * *Petals none, or 1—2 and minute.*

DIALIUM. Stamens 2; anthers 2-rimose. Sepals imbricate. Pod turgid or globose. Leaves unpaired pinnate. Trees.

* * *Anthers versatile, opening by longitudinal slits.*

Subtrib. 2. BAUHINIEÆ. Leaves simple, 2-foliolate or simply pinnate. Calyx gamosepalous, or the sepals free to the disk, imbricate or valvate. Ovary-stalk adnate to the calyx-tube or rarely free.

* *Leaves simple and more or less 2-lobed, or 2-foliolate.* (Eu-Bauhinieæ).

BAUHINIA. Petals unequal. Calyx gamosepalous or valvate. Pods dehiscent. Leaves palmately 5—many-nerved.

* * *Leaves abruptly pinnate.* (Amherstieæ).

× Calyx-tube short, the disk basal or nearly so. (*Cynometreæ.*)

+ Petals none.

HARDWICKIA. Sepals 5, much imbricate. Stamens 10, all perfect or 1—3 reduced to staminodes. Pod flat-compressed, 2-valved at the apex. Leaflets in 1 to several pairs.

+ + Petals 5 or fewer.

CYNOMETRA. Sepals 4—5. Petals 5, imbricate. Stamens 10 or many. Pod fleshy, indehiscent or tardily dehiscing. Leaflets in 1 to many pairs.

× × Disk at the top of a prolonged calyx-tube. (*Eu-Amherstieæ.*)

+ Petal 1—5. Trees.

O Calyx-tube rather short. Petal 1.

SINDORA. Calyx valvate or nearly so, often echinate. Petal sessile. Stamens shortly monadelphous, 2 of them perfect, the rest castrate or reduced to filaments. Leaflets in 2—3 pairs. Seeds arillate. Pods woody, echinate. *

O O Calyx-tube elongate.

† Petal one.

PAHUDIA. Calyx-segments 4, much imbricated. Petal shortly clawed. Stamens 10, 7 of them high-up connate, the rest entirely reduced or 2 of them represented by minute staminodes. Leaflets in 2 or more pairs. Seeds arillate. Pods firmly woody, smooth.

AFZELIA. Calyx-segments 4, much imbricated. Petal clawed. Stamens 3—8, free, with or without a few minute staminodes. Pod large, woody or coriaceous. Seeds not arillate. Leaves abruptly pinnate.

† † Petals 3—5.

TAMARINDUS. Petals 3, with the rudiments of 2 others. Staminodes teeth-like. Stamens monadelphous, only 3 of them developed. Pod turgid, indehiscent, the acid mesocarp pulpy.

AMHERSTIA. Petals 5, 3 of them nearly equally long, and like the lowermost one, very broad, the 2 others minute or rudimentary. Stamens diadelphous (9 + 1).

+ + Petals none.

SARACA. Sepals 4. Stamens 3—9. Pods coriaceous, 2-valved. Trees.

Subtrib. 3. EUCÆSALPINIÆ. Leaves usually abruptly bipinnate. Sepals free to the disk, valvate or imbricate. Ovary or ovary-stalk free.

× Sepals valvate or nearly so. Trees.

POINCIANA. Pod 2-valved, flat, coriaceous. Leaves bipinnate, the leaflets all developed. Unarmed.

PARKINSONIA. Pod turgid-moniliform, indehiscent. Petiole very short, spine-like, with 2—4 much elongate pinnae of minute and often quite reduced leaflets. Armed.

× × Sepals imbricate. Trees or woody climbers.

+ Climbers, usually armed.

CÆSALPINIA. Pods not winged, indehiscent or 2-valved, several-seeded. Stigma small.

PTEROLOBIUM. Pods samaroid, indehiscent, the upper end produced into a conspicuous wing-like appendage, 1-seeded. Ovary 1-ovuled.

MEZONEURON. Pod flat, several-seeded, indehiscent, the upper suture extended into a wing. Stigma small.

+ + Erect trees, not armed.

PELTOPHORUM. Pods flat, several-seeded, indehiscent, both sutures extended into a wing. Stigma peltate. Stamens 10, free.

ACROCARPUS. Pods as in preceding, but indehiscent and winged along the upper suture only. Stigma minute. Petals narrow, almost equal. Stamens 5, free.

Subord. II. Mimoseæ. Flowers regular, the petals valvate in bud, free or more usually united into a shorter or longer tube. Stamens definite or indefinite, free or connate.

Trib. 1. MIMOSEÆ. Stamens definite, usually 10 or 5, or twice as many as the petals.

Subtrib. 1. MIMOSEÆ VERÆ. Anthers gland-tipped or not. Stamens free. Calyx valvate in bud.

* *Anthers gland-tipped.*

× Flowers in spikes or racemes.

ADENANTHERA. Pods 2-valved, often falcate or circinate, transversely chambered between the seeds. Flowers in spikes or racemes. Erect trees. Leaves bipinnate.

ENTADA. Pods large, the indehiscent joints separating from the persistent thickened sutures. Flowers in spikes. Tendril-bearing woody climbers. Leaves bipinnate

× × Flowers in oblong or globose heads.

NEPTUNIA. Pods flat, 2-valved, thin coriaceous. Flowers in dense heads. Erect herbs. Leaves bipinnate.

* * *Anthers not gland-tipped.*

× Pods more or less jointed, the joints receding from the persistent sutures.

MIMOSA. Flowers in dense spikes or heads. Shrubs or herbs, with bipinnate leaves.

× × Pods continuous, not jointed.

+ Valves of pod chartaceous or thin coriaceous.

DESMANTHUS. Pod flat, narrow, 2-valved. Stigma clavate. Herbs with bipinnate leaves. Flowers in heads.

LEUCENA. Pods flat, rather broad, 2-valved. Stigma capitate. Shrubs or small trees with bipinnate leaves. Flowers in globose heads.

+ + Valves of pod thick and woody, falcate.

XYLIA. Pods woody, tardily dehiscent. Flowers in globose heads. Trees with bipinnate leaves.

Subtrib. 2. **PARKIEÆ.** Calyx imbricate in bud. Stamens monadelphous.

PARKIA. Stamens 10, in neuters reduced to long filaments. Flowers in large long-peduncled heads, the lower ones neuter, the upper ones fertile. Trees with bipinnate leaves.

Trib. 2. **ACACIÆÆ.** Stamens indefinite, free or connate.

Subtrib. 3. **ACACIÆÆ VERÆ.** Stamens free.

ACACIA. Pods various, dehiscent or not. Flowers in heads or dense spikes. Trees or shrubs, sometimes climbing, with bipinnate leaves or the leaves reduced to phyllodia, armed or unarmed.

Subtrib. 4. **INGEÆ.** Stamens connate. Flowers in heads or dense spikes.

* *Seeds without an arillus, but on longer or shorter funicles.*

ALBIZZIA. Pods straight. Trees with bipinnate leaves.

PITHECOLOBIUM. Pods more or less circinnate or cochleate. Trees or shrubs, rarely climbing, with bipinnate leaves.

CALLIANDRA. Pods more or less falcate, with much thickened sutures. Trees or shrubs, with bipinnate leaves.

* * *Seeds conspicuously arillate.*

INGA. Pods variously circinnate or cochleate. Trees or shrubs with simply pinnate leaves.

Arillaria, Kurz.

1. **A. ROBUSTA**, Kurz in Journ. As. Soc. Beng. 1873, '71. (*Sophora robusta*, Roxb. Hort. Bengh. 31. ; Wight Icon. t. 245).

HAB. Not unfrequent in the tropical forests of the southern slopes of the Pegu Yomah (above and about Rangoon) and in Upper Tenasserim.—Fl. Apr. June.

Sophora, L.

1. **S. TOMENTOSA**, L. sp. pl. 533 ; Roxb. Fl. Ind. II. 316 ; Miq. Fl. Ind. I. 124 ; Bth. in Mart. Fl. Bras. Papil. 314, t. 124. (*S. occidentalis*, L. l. c. ; Bot. Mag. t. 3390).

HAB. Not unfrequent in the beach-forests of the Andamans ; also Pegu (Brandis).

Lespedeza, Mich.

Conspectus of Species.

* *Flowers in axillary almost sessile clusters.*

Appressed silvery silk-hairy ; leaflets linear-cuneate, *L. sericea*.

* * *Flowers in axillary and terminal racemes often collected into terminal panicles.*

× All parts densely and softly pubescent ; bracts deciduous.

Softly tomentose ; racemes robust and sessile ; calyx-teeth almost filiform and flexuose, *L. pinetorum*.

× × Branchlets and underside of leaves appressedly greyish puberulous.

Racemes glandular-pubescent ; bracts persistent, *L. decora*.

Racemes tawny pubescent, not glandular ; bracts deciduous, *L. parviflora*.

1. *L. SERICEA*, Miq. Ann. Mus. Lugd. Bat. III. 49; Maxim. Syn. Lesped. 42; Hf. Ind. Fl. II. 142 (*Hedysarum sericeum*, Thbg. Fl. Japon. 289; *L. cuneata*, Don. Gen. Syst. II. 307; *Hedysarum junceum*, Roxb. Fl. Ind. Bat. III. 362, non L. f.).

HAB. Ava, Khakyen hills, east of Bhamo (J. Anderson).—Fl. May.

2. *L. PINETORUM*, Kurz in Journ. As. Soc. Beng. 1873, 230 and l. c. 1874. 184 sub. 13.

HAB. Not unfrequent in the drier hill-forests of Martaban, at 4000 to 6000 ft. elevation.—Fl. Fr. March.

Allied to *L. tomentosa*, Sieb.

3. *L. DECORA*, Kurz in Journ. As. Soc. Beng. 1873, 231; Hf. Ind. Fl. II. 144.

HAB. Frequent in the drier, especially the pine-forests of Martaban, at 4000 to 6000 ft. elevation.—Fl. March; Fr. Apr.

Allied to *L. eriocarpa*, DC.

4. *L. PARVIFLORA*, Kurz in Journ. As. Soc. Beng. 1873, 231; Hf. Ind. Fl. II. 144.

HAB. Martaban hills (Nattoung), east of Tounghoo (Revd. F. Mason).

Allied to *L. elliptica*, Bth., from which it differs by its much smaller flowers, its subulate calyx-teeth, the different vestiture of its inflorescence, and its deciduous bracts.

Pycnospora, R. Br.

1. *P. HEDYSAROIDES*, RBr. in WA. Prod. I. 197; Bth. Fl. Hongk. 91; Hf. Ind. Fl. II. 153. (*P. nervosa*, WA. Prod. I. 197).

HAB. Tenasserim (Helf. 1813).

Pseudarthria, WA.

1. *P. VISCIDA*, WA. Prod. I. 209; Wight Icon. t. 286; Hf. Ind. Fl. II. 154. (*Hedysarum viscidum*, L. Syst. III. 506; Roxb. Fl. Ind. III. 356; *Desmodium viscidum*, DC. Prod. II. 316).

HAB. Upper Tenasserim (Falconer, Griff.).

Desmodium, Desv.

Conspectus of Species.

A. DEHISCENTIA. Pod-joints dehiscing along the ventral suture.

Subg. 1. Pleurolobium, DC. Pod-joints dehiscing along the more or less indented suture, distinctly separated or continuous and the separation indicated by a transverse line only. Inflorescence in a young state conspicuously imbricate-bracted.

* *All bracts deciduous. Pods continuous, the joints marked only by transverse lines. Erect shrubs or herbs.*

Shrub, the leaflets one-coloured; flowers purple; pod-joints about $2\frac{1}{2}$ lin. long by 3 broad, densely and shortly hirsute, *D. gyroides*.

Annual or biennial, the leaves as often 1- as 3-foliate; with the 2 lateral leaflets much reduced, leaflets white-variegated; flowers pale yellow, turning pale brick-coloured; pod-joints about $2\frac{1}{2}$ lin. long and broad, shortly and sparingly hirsute, .. *D. gyrans*.

* * *Lowermost bracts of young inflorescences more or less persistent. Pods distinctly jointed.*

Leaves 3-foliate, the leaflets elliptical to oblong; fruiting pedicels erect; racemes elongate, *D. heterocarpum*.

Leaves 1—3-foliate, the leaflets more or less orbicular; fruiting pedicels refracted; racemes shorter than the leaves, *D. retroflexum*.

Subg. 2. Sagotia, Walp. Pod-joints dehiscing along the lower more or less indented suture. Young inflorescence not conspicuously bracted.

* *Flowers in many-flowered terminal and axillary racemes which often form terminal panicles. Erect annual herbs.*

Stems and underside of leaves sparingly and appressedly greyish pubescent; panicle glandular-puberulous; pods glabrescent, *D. oblongum*.

Stems and peduncles spreadingly tawny pilose; pods tawny pilose, *D. auricans*.

* * *Flowers few, axillary or in leaf-opposed racemes. Prostrate or diffuse herbs.*

Flowers in leaf-opposed and spuriously terminal simple or branched racemes; leaflets very small, *D. microphyllum*.

Flowers usually yellowish, by 1—4 on a longer or shorter axillary peduncle which is longer than the leaves, *D. reptans*.

Flowers usually purple or rose-coloured, by 1—6 in the leaf-axils, *D. triflorum*.

B. INDEHISCENTIA. Pod-joints not dehiscing in any way.

* *Flowers in terminal and axillary racemes often collected into panicles. Bracts small, deciduous or rarely persistent.*

Subg. 3. Eu-desmodium, DC. Shrubs, undershrubs or herbs, the leaves 1—3-foliate; petiole not winged. Pods various, many-jointed, the joints variously shaped, but never quite square.

* *Pods and ovary quite glabrous, the joints more or less deeply indented on the lower suture, the basal one very shortly stalked.*

× Leaves simple, broader than long, oblate to reniform.

Flowers 3 lin. long, sky-blue, on capillary glandular pedicels $\frac{1}{3}$ — $\frac{1}{2}$ in. long; pod-joints deeply indented at the lower suture, *D. oblatum*.

Flowers small, white, on pedicels $1\frac{1}{2}$ —2 lin. long; pod-joints slightly indented at the lower suture, *D. reniforme*.

× × Leaves oblong to oblong-lanceolate.

Leaves simple, or the lower ones 3-foliate; racemes slender, in diffuse terminal panicles; pod-joints elliptical, 2 lin. long by $1\frac{1}{2}$ broad, *D. substipulaceum*.

* * *Pods and ovary variously clothed with glandular or glandless, straight or hooked hairs.*

× Pod-joints 4—5 times longer than broad, or if shorter stalk-like narrowed at the base.

+ Pod-joints pedicel-like narrowed or abruptly constricted at the base, securiform or crescent-shaped, puberulous.

○ Pod-joints crescent-shaped, abruptly constricted at both ends.

Leaves oblong, acute or blunt, strongly parallel-nerved; pod-joints broadly lunate, tumid and only 2 lin. long, coriaceous, the basal one refracted on a stalk 2 lin. long thickened club-like at the apex, *D. concinnum*.

Leaves divaricately obcordate; pod-joints membranous, broadly lunate, acute and divaricate at both ends, very flat; spreading or trailing herb, *D. obcordatum*.

O O Pod-joints securiform, the basal one long-stalked.

Calyx about a line, the corolla 5 lines long; stalk of basal pod-joint about $1\frac{1}{2}$ lin. long, *D. scalpe*.

Calyx and corolla half the size; stalk of basal pod-joint slender, $\frac{1}{2}$ in. long, .. *D. podocarpum*.

+ + Pod-joints truncate at both ends, oblong to linear-oblong and sessile.

O Leaves pinnately 3-foliolate.

Pod-joints only $1\frac{1}{2}$ —2 lin. long by $\frac{1}{2}$ — $\frac{3}{4}$ lin. broad, densely hooked puberulous, not narrowed at the ends, *D. recurvatum*.

O O Leaves simple, the petiole short.

Pod-joints 6—8, $\frac{2}{3}$ in. long, slightly narrowed at both ends, irregularly striate, shortly glandular-pubescent; petioles longer or shorter, *D. ormocarpoides*.

Very near the preceding, the petiole very short; pod-joints 10—12, about 3 lin. long and hardly a line broad, shortly glandular-pubescent, *D. teres*.

× × Pod-joints narrow, as long or only twice as long as broad.

+ Shrubs or more usually erect or spreading perennials. Pod-joints usually as long as broad, more or less rotundate with truncate ends.

O Leaves simple. Pod-joints indented at the lower suture, about a line long.

Perennial, erect, slightly appressed-pubescent; racemes elongate and very slender; pod-joints sparingly and shortly hispid; leaves acute, *D. Gangeticum*.

As preceding, but diffuse, the leaflets broader and usually blunt, *D. flexuosum*.

Shrub, densely pubescent; racemes tomentose, rather short and robust; pod-joints densely and shortly grey hirsute; leaves blunt, *D. latifolium*.

O O Leaves 3-foliolate. Pod-joints about a line long and broad.

Erect shrubby perennial; leaflets somewhat repand, glaucescent beneath, acute or acuminate; branchlets almost terete; pod-joints densely covered with hooked stiff hairs, *D. sequax*.

Diffuse perennial, the branches sharply 5—6-angular; leaflets entire, blunt; pod-joints sparingly covered with white hooked stiff hairs, *D. diffusum*.

+ + Shrubs or woody undershrubs. Pod-joints usually about twice as long as broad, more or less indented on one or both sutures.

O Bracts of the young inflorescence scarious and large, forming imbricate cones, very deciduous, but the basal ones usually remaining persistent.

† Basal pod-joint sessile.

Racemes sessile or peduncled, rather short; pod-joints $1\frac{1}{2}$ —2 lin. long and nearly as broad, indented on the lower suture, appressed hirsute; branchlets sharply angular, often villous on the corners, *D. floribundum*.

† † Basal pod-joint shortly but distinctly stalked.

Racemes slender, long-peduncled, forming spreading terminal panicles; pod-joints $\frac{1}{2}$ in. long and 3 lin. broad, puberulous, slightly indented; branchlets terete or nearly so, *D. tiliaefolium*.

Racemes very slender and usually shorter than the leaves, sessile or branched from the base; pod-joints 4 lin. long by $2\frac{1}{4}$ broad, more or less indented at the lower suture, sparingly and shortly hirsute; branches angular, *D. karensum*.

Racemes sessile or nearly so, robust, usually axillary or paniced by the fall of the leaves; pod-joints 4 lin. long by $2\frac{1}{2}$ broad, grey-villous, much indented at the lower suture; branchlets rather terete, *D. confertum*.

O O Bracts of the young inflorescence narrow, herbaceous, not conspicuous and imbricating (*Catenaria*, Bth.).

Flowers $\frac{1}{3}$ in. long, often in axillary slender racemes; pod-joints oblong, nearly 4 lin. long, densely and shortly hooked-hairy, the basal one stalked, *D. laburnifolium*.

Subgen. 4. *Pteroloma*, Desv. Shrubs. Leaves 1-foliolate, the petiole winged. Bracts minute. Pods very flat, many-jointed, the joints not or hardly indented and almost square.

Branchlets sharply triquetrous; pods glabrous or pubescent along the sutures or all over, *D. triquetrum*.

* * Flowers clustered or in sessile or peduncled umbels in the axils of the leaves or in the axils of bract-like floral leaves.

Subgen. 5. *Dendrolobium*, WA. Flowers in dense sessile or peduncled axillary umbels or clusters. Bracts minute or deciduous. Leaves pinnately 3-foliolate. Pods 5—1-jointed, appressed pubescent.

* Pods normally 2—1-jointed. Undershrubs. (Dicerma).

Flowers by 2—4 or fewer clustered in the leaf-axils and passing into terminal leafy racemes, *D. biarticulatum*.

* * Pods 2—5-(only occasionally 1-) jointed. Shrubs or trees (*Dendrolobium* proper).

Flowers in sessile clusters; pod-joints only 2 lin. long, *D. cephalotes*.

Flowers in peduncled umbels; pod-joints about 4 lin. long, *D. umbellatum*.

Subgen. 6. *Phyllodium*, Desv. Flowers clustered or umbellate, in the axils of bract-like large floral leaves which are complicately 2-foliolate, persistent, and placed distichously. Leaves pinnately 3- or rarely 1-foliolate. Pods 2—4-jointed.

* Pods pubescent or villous-pubescent.

Leaflets 3—5 in. long, acuminate; pods villously pubescent, *D. grande*.

Leaflets 1—2 in. long, rounded or almost retuse, *D. vestitum*.

* * Pods glabrous except on the margin.

Leaves pinnately 3- or occasionally 1-foliolate, the petiole only 2—3 lin. long; pods glabrous, net-veined, *D. pulchellum*.

1. *D. GYROIDES*, DC. Prod. II. 326; Hf. Ind. Fl. II. 475 (*D. pseudo-gyroides*, Miq. Fl. Ind. Bat. I. 244).

HAB. Frequent in the mixed forests, especially the upper ones, chiefly in the stony bed of streams, all over Burma, from Arracan, Pegu, and Martaban down to Tenasserim.—Fl. Close of RS.; Fr. CS.

2. *D. GYRANS*, DC. Prod. II. 336; Wight Icon. t. 294; Hf. Ind. Fl. II. 174 (*Hedysarum gyrans*, Lamk. Suppl. 332; Jacq. Icon. rar. t. 562; Roxb. Fl. Ind. III. 317).

HAB. Common in all leaf-shedding forests, but more especially in the savannahs, in grassland and amongst shrubbery of the plains, ascending into the drier hill-forests and hill-pastures up to 4000 ft. elevation, all over Burnah, from Chittagong and Ava down to Tenasserim.—Fl. Fr. CS.

3. *D. HETEROCARPUM*, DC. Prod. II. 337 (*Hedysarum heterocarpum*, L. sp. pl. 1054; Burm. Fl. Zeyl. 117, t. 53, f. 1.; *D. polycarpum*, DC. l. c. 334; Wight Icon. t. 406; Bak. in Fl. trop. Afr. II. 165; Hf. Ind. Fl. II. 171; *Hedysarum purpureum*, Roxb. Fl. Ind. III. 358; *D. patens*, Wight Icon. t. 407; *Hedysarum patens*, Roxb. Fl. Ind. III. 362).

Var. *α*. *GENUINUM*, branches and leaves beneath only thinly appressed-pubescent; pods glabrous with fringed edges, or sparingly and minutely stiff-hairy.

Var. *β*. *TRICHOCAULON*, Bak. in Hf. Ind. Fl. II. 172 (*D. trichocaulon*, DC. Prod. II. 336; Hassk. Pl. Jav. rar. 367; Bth. Fl. Austr. II. 235), branches densely and spreadingly pilose, the leaves beneath appressed pilose; the rest as in var. *α*.

Var. *γ*. *CAPITATUM*, (*D. capitatum*, DC. Prod. II. 225; Miq. Fl. Ind. Bat. I. 241; Hf. Ind. Fl. II. 170; *Hedysarum capitatum*, Burm. Fl. 167, t. 54, f. 1), branches and leaves beneath more or less silvery pubescent, the leaflets smaller; pods puberulous.

HAB. Var. *α*. common in all leaf-shedding forests, especially the mixed ones, entering also the savannahs and cultivated lands, all over Burma and the adjacent islands; var. *β*. Ava hills; var. *γ*. Arracan.—Fl. Close of RS.; Fr. CS.

4. *D. RETROFLEXUM*, DC. Prod. II. 336; Hf. Ind. Fl. II. 170. (*Hedysarum retroflexum*, Linn. Mant. 103).

HAB. Tenasserim (Helf. 1692).

5. *D. OBLONGUM*, Wall. Cat. 5714; Bth. Pl. Jungh. I. 224 in adn.

HAB. Rather frequent in the upper mixed forests of the Pegu Yomah; Ava, Taong Dong (Wall.).—Fl. Nov.; Fr. CS.

This agrees so far with Hasskarl's description of *D. Aparines* (Miq. Fl. Ind. Bat. I. 252), but I have no specimens to compare with.

6. *D. AURICANS*, Grah. in Wall. Cat. 5704; Bth. in Pl. Jungh. I. 223 in adn.; Kurz in Journ. As. Soc. Beng. 1873, 23; Hf. Ind. Fl. II. 172.

HAB. Frequent amongst shrubbery in sandy grounds in the neighbourhood of the sea in Arracan; Tenasserim, Tavoy (Wall.).—Fl. Close of RS.; Fr. CS.

7. *D. MICROPHYLLUM*, DC. Prod. II. 336; Miq. Fl. Ind. Bat. I. 239. (*Hedysarum microphyllum*, Thbg. Fl. Japan. 284; *D. parvifolium*, DC. l. c. 334; Hf. Ind. Fl. II. 174).

HAB. Martaban, Yoonzeleen, at 2500 ft. elevation (Brandis); Ava (teste Baker).—Fl. Fr. March.

8. *D. REPTANS* (*Hedysarum reptans*, Burm. Fl. Zeyl. t. 54. f. 1; Roxb. Fl. Ind. III. 354; *D. heterophyllum*, DC. Prod. II. 334; Hf. Ind. Fl. II. 173; *D. triflorum* var. WA. Prod. I. 229; Wight Icon. t. 291; *Hedysarum heterophyllum*, Willd. sp. pl. III. 1201).

HAB. More in woody lands and amongst shrubbery of Pegu and Tenasserim.—Fl. Fr. RS.

9. *D. TRIFLORUM*, DC. Prod. II. 334; Wight Icon. t. 292; Bth. in Mart. Fl. Bras. XV. 95. t. 26; Hf. Ind. Fl. II. 173. (*Hedysarum triflorum*, L. sp. pl. 1057; Roxb. Fl. Ind. III. 353; *Hedysarum stipulaceum*, Burm. Fl. Ind. t. 54. f. 2.).

HAB. Frequent in short-grassed pastures and in cultivated lands, rubbishy places, along river-banks, &c., all over Burma, from Chittagong and Ava down to Tenasserim; on the Andamans introduced only.—Fl. Fr. RS. chiefly.

10. *D. OBLATUM*, Bak. in Journ. As. Soc. Beng. 1873, 230; Hf. Ind. Fl. II. 166.

HAB. Not unfrequent in the tropical forests, especially along rocky choungs, of the Pegu Yomah and the Martaban hills; also Prome hills; Ava, on Taong-Dong.—Fl. Fr. C. and HS.

11. *D. RENIFORME*, DC. Prod. II. 327; Hf. Ind. Fl. 173. (*Hedysarum reniforme*, L. sp. pl. 1051; Burm. Fl. Ind. t. 52. f. 1.).

HAB. Prome; Ava, on the banks of the Irrawaddi (according to Baker).

All Burmese specimens seen by me belong to the preceding species. I myself gathered the true Burmannian plant only in the Terai-lands of Sikkim.

12. *D. SUBSTIPULACEUM*, Bl. MS. (*D. stipulaceum*, Miq. Fl. Ind. Pat. I. 252, non DC.; *Hedysarum mucronatum*, Bl. Buitenz. Cat. 92).

HAB. Martaban, Nattoung Hills. (Revd. F. Mason).

This species greatly resembles the American *D. stipulaceum*, DC. (which I suppose to be the same as *D. cajanifolium*, DC., referred to by Baker in Fl. Ind. II. 161). It differs in its stouter stature and its broad ovate (not linear-subulate) calyx-lobes. The pod-joints are glabrous and net-veined, not hooked-pilose like those of Hasskarl's *D. Aparines*, which Miquel combines with *D. stipulaceum*, while Baker would make it synonymous with *D. spirale*.

13. *D. CONCINNUM*, DC. Prod. II. 335; Miq. Fl. Ind. Bat. I. 245; Hf. Ind. Fl. II. 170. (*D. pendulum*, Wall. Pl. As. rar. I. t. 94.).

HAB. Not unfrequent in grass-lands of the drier hill-forests (especially the pine-forests) of Martaban, at 4000 to 6000 ft. elevation.—Fr. March.

14. *D. OBCORDATUM*, Kurz in Journ. As. Soc. Beng. 1873, 229; Hf. Ind. Fl. II. 166. (*Uraria obcordata*, Miq. Suppl. Fl. Sumatr. 114 and 305).

HAB. Tenasserim, Moulmein District (Falconer).—Fr. Febr.

15. *D. SCALPE*, DC. Prod. II. 334; Bak. in Fl. trop. Afr. II. 164; Hf. Ind. Fl. II. 165. (*D. strangulatum*, WA. Prod. I. 228; Wight Icon. t. 985).

HAB. In the moister hill-forests of Martaban, east of Tounghoo, at 4000 to 5000 ft. elevation.

Baker identifies the *D. trichocaulon* of Hasskarl's Pl. Jav. rar. 367 with the above, but this he could only do by simply guessing, for the description does not in the least agree and the dehiscent pods at once indicate its true affinity.

16. *D. PODOCARPUM*, DC. Prod. II. 336 ; Hf. Ind. Fl. II. 165.

HAB. Ava Hills.

N. B. If *D. laxum*, DC. l. c. (*Hedysarum laxum*, Spreng. Syst. app. 292) is correctly referred to the above species (as to which I entertain grave doubts), this name has precedence.

17. *D. RECURVATUM*, Grah. in Wall. Cat. 5717 ; WA. Prod. 226 ; Wight Icon. t. 374 ; Miq. Fl. Ind. Bat. I. 250. (*Hedysarum recurvatum*, Roxb. Hort. Bengh. 57. and Fl. Ind. III. 358 ; Wight Icon. t. 409 ; *Hedysarum diffusum*, Roxb. Fl. Ind. III. 357, non Willd ; *D. laxiflorum*, DC. Prod. II. 335 ; Hf. Ind. Fl. II. 164 ; *D. diffusum*, DC. l. c. 335, not 336).

HAB. Common in the dry and upper mixed forests of Chittagong, Arracan, and Pegu.—Fl. Close of RS. ; Fr. CS.

18. *D. TERES*, Wall. Cat. 5694 ; Bth. in Pl. Jungh. I. 225 in adn. ; Hf. Ind. Fl. II. 164.

HAB. Ava, Taong Dong (Wall.).

19. *D. GANGETICUM*, DC. Prod. II. 327 ; Wight Icon. t. 271 ; Hf. Ind. Fl. II. 168. (*Hedysarum Gangeticum*, L. sp. pl. 1052 ; Roxb. Fl. Ind. III. 349 ; *Hedysarum collinum*, Roxb. Fl. Ind. III. 348 ; *D. latifolium*, Wight Icon. t. 272).

HAB. Frequent in all deciduous forests, especially the mixed ones, also entering the savannahs and cultivated lands, all over Burma, from Chittagong and Ava down to Tenasserim.—Fl. RS. ; Fr. CS.

20. *D. FLEXUOSUM*, Wall. Cat. 5691 ; Bth. in Pl. Jungh. 224, in adn. ; Hf. Ind. Fl. II. 168.

HAB. Prome Hills.

This, as already suggested by Bentham, is hardly more than a diffuse variety of *D. Gangeticum*, with broader leaves and spreadingly hirsute branches.

21. *D. LATIFOLIUM*, DC. Prodr. II. 328 ; Wight Icon. t. 370 ; Hf. Ind. Fl. II. 168. (*Hedysarum latifolium*, Roxb. Hort. Beng. 57 and Fl. Ind. III. 350 ; Bot. Reg. t. 355 ; *D. lasiocarpum*, DC. Prod. II. 328 ; Bak. in Fl. trop. Afr. II. 162).

HAB. Frequent in the dry and open forests of Ava, Prome, Pegu, and Martaban.—Fl. Close of RS. ; Fr. CS.

22. *D. SEQUAX*, Wall. Pl. As. rar. II. t. 157 ; Hf. Ind. Fl. II. 170.

(*D. sinuatum*, Bl. MS. ap. Miq. Fl. Ind. Bat. I. 255; Hf. Ind. Fl. II. 166; *D. dasylobum*, Miq. Suppl. Fl. Sum. 113 and 305).

HAB. In the drier hill-forests of Martaban, east of Tounghoo, at 4000 to 5000 ft. elevation.

23. *D. DIFFUSUM*, DC. Prod. II. 336; Wight Icon. t. 298; Hf. Ind. Fl. II. 169. (*Hedysarum diffusum*, Willd. Sp. pl. III. 1180; *Hedysarum auriculatum*, and *H. quinqueangulatum*, Roxb. Fl. Ind. III. 355; *D. quinquangulare*, Wight Icon. t. 293).

HAB. Prome Hills (Wall. Cat. 5716, D.).—Fl. Sept.—Octob.

24. *D. FLORIBUNDUM*, Don. Gen. Syst. II. 297; Hf. Ind. Fl. II. 167. (*Hedysarum floribundum*, Don. Prod. Nep. 244; *D. multiflorum*, DC. Prod. II. 335; *D. dubium*, Ldl. Bot. Reg. t. 967; Bot. Mag. t. 2960).

HAB. Not unfrequent in the drier hill-forests of Martaban and Upper Tenasserim, at 4000 to 5000 ft. elevation.—Fl. Close of RS.; Fr. March.

25. *D. TILÆFOLIUM*, Don. Gen. Syst. II. 297; Hf. Ind. Fl. II. 168.

HAB. Tenasserim, Tavoy (according to Baker).

26. *D. KARENSIUM*, Kurz, MS.

HAB. Martaban, rare in the pine-forests east of Tounghoo, at 4000 to 5000 ft. elevation; Ava, Khakyen Hills east of Bhamo.—Fr. March.

27. *D. LABURNIFOLIUM*, DC. Prod. II. 337; Hf. Ind. Fl. II. 163. (*Hedysarum laburnifolium*, Poir. Dict. VI. 422; *Catenaria laburnifolia* Bth. in Pl. Jungh. I. 220).

HAB. Ava Hills.

28. *D. TRIQUETRUM*, DC. Prod. II. 326; Hf. Ind. Fl. II. 163. (*Hedysarum triquetrum*, L. sp. pl. 1050; Roxb. Fl. Ind. III. 847; *Pteroloma triquetrum*, Bth. in Pl. Jungh. I. 220).

VAR. *α*. *GENUINUM*, pods more or less greyish hirsute or villous, larger and usually somewhat curved; flowers larger.

VAR. *β*. *PSEUDO-TRIQUETRUM*, (*D. pseudo-triquetrum* and *D. alatum*, DC. Prod. II. 326; *Hedysarum alatum*, Roxb. Fl. Ind. III. 348), pods glabrous or pubescent only on the edges, shorter and straight; flowers smaller.

HAB. Common in all leaf-shedding forests, especially the mixed ones, but also ascending into the drier hill-forests up to 5000 ft. elevation; all over Burma, from Chittagong and Ava down to Tenasserim and the Andamans; var. *β*. equally common, but restricted to low levels.—Fl. Fr. Close of RS., and CS.

29. *D. BIARTICULATUM*, F. Muell. Fragm. Phyt. II. 121; Bth. Fl. Austr. II. 231; Hf. Ind. Fl. II. 163. (*Dicerma biarticulatum*, DC. Prod. II. 339; Wight Icon. t. 419; *Hedysarum biarticulatum*, L. sp. pl. 1054; Roxb. Fl. Ind. III. 359).

HAB. Ava, Irrawaddi valley at Mengoon (J. Anderson) and Paghamyo (Wall.).—Fr. Jan.

30. *D. CEPHALOTES*, Wall. Cat. 5721; Wight Icon. t. 373; Bedd. Fl. Sylv. 87. Anal. t. 12. f. 4; Hf. Ind. Fl. II. 162. (*Dendrolobium cephalotes*, Bth. Pl. Jungh. I. 218; *Hedysarum cephalotes*, Roxb. Fl. Ind. III. 360; *Hedysarum umbellatum*, Roxb. l. c.; *D. congestum*, Wall. Cat. 5723; Wight Icon. t. 209).

HAB. Common in the mixed forests, especially the lower ones, entering also the savannahs; all over Chittagong and Ava, down to Pegu and Arracan.—Fl. Close of RS.; Fr. CS.

31. *D. UMBELLATUM*, DC. Prod. II. 325; Bth. Fl. Austr. II. 230; Hf. Ind. Fl. II. 161. (*Dendrolobium umbellatum*, WA. Prod. I. 224; *Hedysarum umbellatum*, L. sp. pl. 1053).

HAB. Frequent in the beach-forests all along the coasts of the Andamans and Tenasserim; re-appears on the limestone hills of Segain, Ava.—Fl. Fr. CS.

32. *D. GRANDE*, Kurz in Journ. As. Soc. Beng. 1874, 184; Hf. Ind. Fl. II. 162.

HAB. Ava, Irrawaddi valley near Tagoung (J. Anderson).—Fl. RS.

33. *D. VESTITUM*, Bth. MS.; Hf. Ind. Fl. II. 162. (*Phyllodium vestitum*, Bth. in Pl. Jungh. I. 217).

HAB. Tenasserim, from Moulmein down to Mergui.—Fr. CS.

34. *D. PULCHELLUM*, Bth. in Hongk. Fl. 83; Hf. Ind. Fl. II. 162. (*Dicerna pulchellum*, DC. Prod. II. 339; Wight Icon. t. 418; *Hedysarum pulchellum*, Roxb. Fl. Ind. III. 361).

HAB. Frequent in all deciduous but chiefly in the open and dry forests, all over Burma, from Chittagong and Ava down to Tenasserim; also Andamans.—Fl. RS.; Fr. CS.

Alysicarpus, Neck.

Conspectus of Species.

* *Calyx shorter than the first pod-joint.*

Pod-joints inflated-globular, without wrinkles or veins, *A. monilifer*.

Pod-joints slightly compressed, thickened at the truncate ends, obsoletely wrinkled-net-veined, *A. vaginalis*.

* * *Calyx much longer than the first pod-joint, the teeth much imbricate in fruit.*

Calyx-lobes lanceolate, acuminate; pods as long or twice as long as the calyx, the joints (fully ripe) almost smooth, obliquely 4-angular, *A. bupleurifolius*.

Glabrous; calyx-lobes broader and acute; pod enclosed in the scarious calyx, the joints broader than long, strongly and transversely wrinkled, *A. rugosus*.

As preceding, but stems silk-hairy, the calyx-lobes and bracts fringed with long silky hairs; pod-joints twice the size, *A. styracifolius*.

1. *A. MONILIFER*, DC. Prod. II. 353 ; Hf. Ind. Fl. II. 157. (*Hedysarum moniliferum*, L. Mant. 102 ; Burm. Fl. Ind. t. 52, f. 3 ; Roxb. Fl. Ind. III. 345).

HAB. Ava ; Tenasserim, near Moulmein (Wall.).

2. *A. VAGINALIS*, DC. Prod. II. 353 ; Hf. Ind. Fl. II. 158. (*Hedysarum vaginale*, L. sp. pl. 1051 ; Roxb. Fl. Ind. III. 345).

Var. *a. GENUINA*, leaves all, or only the cauline ones, narrow.

Var. *β. NUMMULARIFOLIUS*, Miq. Fl. Ind. Bat. I. 232 ; Hf. Ind. Fl. II. 158. (*Alysicarpus nummularifolius*, DC. Prod. II. 353 ; *Hedysarum nummularifolium*, L. sp. pl. 1051), leaves all more or less oval or almost orbicular, usually small and sometimes very small or minute.

HAB. Frequent in grassy places of all leaf-shedding forests and in cultivated lands, all over Chittagong, Pegu, and Martaban, down to Tenasserim ; var. *β.* more in the drier forests, in sandy pastures, etc.—Fl. Close of RS. ; Fr. CS.

3. *A. BUPLEURIFOLIUS*, DC. Prod. II. 352 ; Hf. Ind. Fl. II. 158. (*Hedysarum bupleurifolium*, L. sp. pl. 1081, non Roxb. ; *Hedysarum gramineum*, Retz. Obs. v. 26 ; Roxb. Fl. Ind. III. 646).

HAB. Frequent in long-grassed jungle-pastures of the dry and open (especially the low) forests, from Ava and Prome down to Pegu.—Fl. RS. ; Fr. CS.

4. *A. RUGOSUS*, DC. Prod. II. 353 ; Bth. Fl. Austr. II. 239 ; Hf. Ind. Fl. II. 159. (*Hedysarum rugosus*, Willd. sp. pl. III. 1173 ; *Hedysarum bupleurifolium*, Roxb. Fl. Ind. III. 646, non L. ; *A. Wallichii*, WA. Prod. I. 234).

HAB. Frequent in all leaf-shedding forests, especially in the savannahs and savannah-forests, and in grassy cultivated lands of the alluvial plains of Pegu.—Fl. Close of RS. ; Fr. CS.

5. *A. STYRACIFOLIUS*, DC. Prod. II. 353. (*Hedysarum glumaceum*, Koen. ap. Roxb. Fl. Ind. III. 247 ; *A. rugosus* var. *styracifolius*, Bak. in Hf. Ind. Fl. II. 159).

HAB. Ava (according to Baker).

N. B. *Hedysarum procumbens*, Roxb. Fl. Ind. III. 346, is the same as *Alys. hamosus*, Edg., and Roxburgh's name has precedence.

Mecopus, Benn.

1. *M. NIDULANS*, Benn. in Horsf. Pl. Jav. rar. 154, t. 32 ; Miq. Fl. Ind. Bat. I. 266 ; Hf. Ind. Fl. II. 160.

HAB. Very common in the upper mixed forests of the Pegu Yomah, less frequent in similar forests of Martaban and Tenasserim.—Fl. Close of RS. ; Fr. CS.

Lourea, Neck.

Conspectus of Species.

* *Glabrous herbs. Calyx glabrous.*

Terminal leaflet several times broader than long, transversely divaricate-lunate, *L. vespertilionis*.

Terminal leaflet barely twice as broad as long, obversely reniform, *L. paniculata*.

* * *More or less puberulous or pilose herbs. Calyx pubescent or villous.*

Leaflets obversely reniform to oblate; racemes simple, terminal, *L. reniformis*.

I. *L. PANICULATA*, Wall. Cat. 5673; Bth. in Pl. Jungh. I. 215 in adn.; Hf. Fl. II. 154.

HAB. Ava, Taong dong (Wall.).

2. *L. RENIFORMIS*, DC. Prod. II. 324. (*Hedysarum reniforme*, Lour. Fl. Coch. II. 345; *L. obovata*, Desv. Journ. Bot. III. 122; Hf. Ind. Fl. II. 154).

HAB. Ava, on the limestone hills of Segain and Pagha myo (Wall.).—Fl. Oct.

Uraria, Desv.

Conspectus of Species.

* *Flowers in elongate slender lax racemes, the upper ones collected into terminal panicles.*

× Bracts subulate, persisting at the flowering. Pedicels in fruit straight, but reflexed.

Calyx-lobes $1\frac{1}{2}$ lin. long, long-tawny-pilose; stipules lanceolate, $\frac{1}{2}$ in. long; pods densely hooked-hispid, *U. cordifolia*.

× × Bracts very deciduous long before opening of the flowers. Pods minutely puberulous. Pedicels in fruit arcuate.

Pods glossy; calyx about 2 lin. long, in fruit rather ample and almost enclosing the pod, *U. campanulata*.

Pods opaque; calyx $1\frac{1}{2}$ —2 lin. long, very much shorter than the pod, *U. hamosa*.

* * *Flowers in dense thick simple or almost simple racemes.*

× Bracts all very deciduous and fallen long before opening of the flowers.

O Upper leaves pinnately 5—9-foliolate.

† Leaflets narrow.

Leaflets white-variegated, blunt or bluntish, the net-venation beneath strong and close; pod-joints leaden-coloured, polished; seeds pale-coloured, *U. picta*.

Leaflets glaucous-green, one-coloured, long and very sharply acuminate, the net-venation very thin and lax; pod-joints glossy; seeds brown, *U. acuminata*.

† † Leaflets broad.

Leaflets with prominent and close net-venation; pod-joints opaque, *U. crinita*.

O O Leaves 1- and 3-foliolate (often on the same plant).

Rather stout plant, usually tawny pilose; pods opaque, net-veined, *U. Lagopus*.

× × Bracts all persistent at flowering time and conspicuous.

Robust, the racemes elongate and brown-pilose; pods glossy black, ... *U. alopecuroides*.

Slender, the racemes short and greyish pilose; pods pale-coloured, opaque, *U. lagopoides*.

1. *U. CAMPANULATA*, Wall. Cat. 5685; Voigt Hort. Calc. 221. (*Lourea campanulata*, Bth. in Pl. Jungh. I. 215 in adn.; Hf. Ind. Fl. II. 155).

HAB. Ava, Taong Dong (Wall.).—Fl. R. and CS.; Fr. CS.

This species connects *Uraria* and *Lourea*, two genera rather too artificially separated.

2. *U. HAMOSA*, Wall. Cat. 5681; Wight Icon. t. 284; Hf. Ind. Fl. II. 156. (*Doodia hamosa*, Roxb. Fl. Ind. III. 367; *Desmodium Horsfieldii*, Miq. Fl. Ind. Bat. I. 251; *Desmodium dasyphyllum*, Miq. l. c. 253, teste Baker).

HAB. Frequent in all leaf-shedding forests, especially the mixed ones and the eng-forests, entering also the savannahs, from Chittagong and Ava down to Pegu and Arracan.—Fl. Close of RS.; Fr. CS.

Doodia simplicifolia, Roxb. Fl. Ind. III. 366, seems to be only the simple-leaved form of this species, which Wallich distributed under the name of *U. leptostachya*.

3. *U. CORDIFOLIA*, Wall. Pl. As. rar. I. 33, t. 37; Hf. Ind. Fl. II. 157.

HAB. Not unfrequent in the dry forests of Ava and Prome, occasionally seen in the drier upper mixed forests of the Pegu Yomah.—Fl. Fr. Close of RS.

4. *U. PICTA*, Desv. Journ. d. Bot. III. 122; Wight Icon. t. 411; Hf. Ind. Fl. II. 155 (*Hedysarum pictum*, Jacq. Icon. rar. III. t. 567; *Doodia picta*, Roxb. Fl. Ind. III. 368).

HAB. Not rare along river-banks and in grass-lands of Chittagong and Arracan; also Ava.—Fl. Fr. RS.

5. *U. ACUMINATA*, Kurz MS.

HAB. Not unfrequent in the eng-forests of Pegu and Martaban.—Fl. CS.

Very near to the preceding, but it has altogether a different look and differs in the characters given above.

6. *U. CRINITA*, Desv. Journ. d. Bot. III. 122; Hf. Ind. Fl. II. 155 excl. syn. Icon. Wight. (*Hedysarum crinitum*, L. Mant. 102; Burm. Fl. Ind. 169. t. 56; *Doodia crinita*, Roxb. Fl. Ind. III. 369).

Var. β . *MACROSTACHYA*, Wall. Pl. As. rar. II. 8. t. 110; more robust, the leaves larger; racemes 1—1½ feet long.

HAB. Frequent in the mixed forests all over Burma, from Chittagong, Ava, Pegu, and Martaban down to Tenasserim.—Fl. Close of RS.; Fr. CS.

7. *U. LAGOPUS*, DC. Prod. II. 324; Hf. Ind. Fl. II. 156 (excl. syn. Wight and Roxb.) (*U. lagopoides*, Royle Ill. Him. Pl. 201 t. 33. f. 1.).

HAB. Chittagong.—Fl. Close of RS.

8. *U. ALOPECUROIDES*, Wight Icon. t. 290. (*Doodia alopecuroides*,

Roxb. Fl. Ind. III. 368; *U. repanda*, Wall. Cat. 5677; Bth. in Pl. Jungh. I. 269; Hf. Ind. Fl. II. 156).

HAB. Along the banks of the Irrawaddi in Prome and Ava.—Fl. RS.

9. *U. LAGOPOIDES*, DC. Prod. II. 324; Wight Icon. t. 289; Hf. Ind. Fl. II. 156 (*Hedysarum lagopoides*, L. sp. pl. 1057; Burm. Fl. Ind. 68. t. 53. f. 2.; *Doodia lagopodioides*, Roxb. Fl. Ind. III. 366).

HAB. Chittagong; most probably in other parts of Burma.—Fl. RS.

Zornia, Gmel.

1. *Z. DIPHYLLA*, Pers. Syn. II. 318; Bth. Fl. Austr. II. 228 and in Mart. Fl. Bras. XV. 80. t. 21-22; Hf. Ind. Fl. II. 147 (*Hedysarum diphyllum*, L. sp. pl. 560; Roxb. Fl. Ind. III. 353.)

HAB. Not unfrequent on sandy or gravelly pastures and in grassy places of the eng and dry forests, all over Arracan, Pegu, and Prome; also Ava.—Fl. Fr. RS.

Arachis, L.

*1. *A. HYPOGÆA*, L. sp. pl. 1040; Roxb. Fl. Ind. III. 280; WA. Prod. I. 280; Miq. Fl. Ind. I. 281.

HAB. Cultivated all over Burma.—Fl. Fr. R. and CS.

Smithia, Ait.

Conspectus of Species.

- * *Fruiting calyx simply striate, not reticulate, the lobes more or less acute; joints of pod more or less globular.*

Calyx-lobes quite glabrous and nude; flowers in slenderly peduncled naked heads or short racemes.....*S. sensitiva*.

Calyx-lobes more or less hairy-fringed on the keel beneath; flowers in dense sessile heads involucred by the uppermost leaves,*S. conferta*.

Calyx-lobes minutely toothed, the teeth all excurrent into long stiff bristles; flowers in dense slenderly peduncled naked heads,*S. ciliata*.

- * * *Fruiting calyx urceolate-bell-shaped, striate and net-veined, the lobes more or less truncate; pod-joints (and also the seeds) much compressed.*

Leaflets in 4 to 2 pairs; upper part of stipule about 3 lin. long; pod-joints 10—12, about a line long, papillose,*S. dichotoma*.

Leaflets in 10—15 pairs; upper part of stipule nearly an in. long; pod-joints 20—25, 2 lin. long or longer, veined,*S. grandis*.

1. *S. SENSITIVA*, Ait. Hort. Kew. III. 496 t. 13; Roxb. Fl. Ind. III. 342; Salisb. Parad. Lond. t. 92; Hf. Ind. Fl. II. 148. (*S. Javanica*, Bth. in Pl. Jungh. I. 211; Miq. Fl. Ind. Bat. I. 271).

HAB. Very frequent in moist pasture-land, along grassy borders and in fallow fields, especially in diluvial lands, all over Burma, from Chittagong, Pegu, and Martaban down to Tenasserim.—Fl. Fr. RS.

2. *S. CONFERTA*, Sm. in Rees Cyclop. XXXIII. No. 2 ; Miq. Fl. Ind. Bat. I. 272. (*S. geminiflora*, var. *conferta*, Bak. in Hf. Ind. Fl. II. 149 ; *S. hispidissima*, Zoll. in Geneesk. Arch. III. 55).

HAB. Tenasserim, Tavoy (Wall. Cat. 5668 I).—Fl. Octob.

3. *S. CILIATA*, Royle Ill. Him. Pl. 201. t. 35. f. 2 ; Hf. Ind. Fl. II. 150.

HAB. Not unfrequent in the hill-pastures and in grassy spots of the drier hill-, especially the pine-forests of Martaban, at 3500 to 5000 feet elevation ; also largely entering the deserted hill-toungyas.—Fl. Fr. RS.

4. *S. DICHOTOMA*, Dalz. MS. ; Hf. Ind. Fl. II. 150.

HAB. Arracan, in long-grassed pastures on sandstone banks near the sea opposite Akyab.—Fl. Fr. Octob.

5. *S. GRANDIS*, Bth. MS. ; Hf. Ind. Fl. II. 151.

HAB. Pegu, in diluvial lands bordering the southern and western base of the Pegu Yomah, rather rare in temporarily inundated long-grassed jungle-pastures.—Fl. Fr. RS.

Geissaspis, WA.

1. *G. CRISTATA*, WA. Prod. I. 218 ; Bedd. Icon. t. 293 ; Hf. Ind. Fl. II. 141.

HAB. Common in wet pastures, rice-fields, etc., especially of the alluvial plains, all over Arracan, Pegu, and Martaban down to Tenasserim ; also Ava.—Fl. RS. ; Fr. Close of R. and begin of HS.

Æschynomene, L.

Conspectus of Species.

Calyx and corolla glabrous, the latter only 4 lin. long ; pod-joints only 2 lines long,
 ...*Æ. Indica*.

Calyx and outside of keel of corolla sparingly hairy, the corolla about an in. long ; pod-joints about $\frac{1}{2}$ in. long,*Æ. aspera*.

1. *Æ. INDICA*, L. sp. pl. 1061 ; Wight Icon. t. 405 ; Hf. Ind. Fl. II. 151. (*Æ. Cachemiriana*, Camb. in Jacq. Voy. 40. t. 48 ; *Æ. sensitiva*, P. d. B. Fl. d'Owar. 89. t. 53, non Sw. ; *Hedysarum Neli-tali*, Roxb. Fl. Ind. III. 365 ; *Smithia aspera*, Roxb. l. c. 343).

HAB. Frequent in swamps and along swampy river-sides, in wet pastures, etc., all over Burma, from Chittagong and Ava down to Tenasserim.—Fl. Fr. RS.

2. *Æ. ASPERA*, L. sp. pl. 1060 ; Wight Icon. t. 299 ; Hf. Ind. Fl. II. 152. (*Hedysarum lagenarium*, Roxb. Fl. Ind. III. 365 ; *Æ. trachyloba*, Miq. Fl. Ind. Bat. I. 276).

HAB. Chittagong and Arracan, along borders of tanks and in swampy grass-lands ; probably also in Pegu and elsewhere.—Fl. Fr. RS.

Ormocarpum, P. d. B.

1. *O. SENNOIDES*, DC. Prod. II. 315; Wight Icon. t. 297; Hf. Ind. Fl. II. 152. (*Hedysarum sennoides*, Willd. sp. pl. III. 1207; Roxb. Fl. Ind. III. 364; *O. ochroleucum*, Zoll. and Mor. Syst. Verz. 6.; Miq. Fl. Ind. Bat. I. 1083).

HAB. Siam; most probably also in Tenasserim.

Cicer, L.

*1. *C. ARIETINUM*, L. sp. pl. 1040; Roxb. Fl. Ind. III. 324; Bot. Mag. t. 2274; Wight Icon. t. 20; Schrank Handb. t. 202; Sibth. Fl. Græc. t. 703; DC. Legum. t. 54; Hf. Ind. Fl. II. 176.

HAB. Generally cultivated in the plains all over Burma.—Fl. Fr. CS.

Vicia, L.

Conspectus of Species.

Flowers solitary, almost sessile, nearly $\frac{1}{2}$ in. long; pods glabrous, 6—18-seeded,
.. *V. sativa*.

Flowers hardly 2 in. long, several (2—8) forming a peduncled raceme; pods shortly hairy, 2-seeded, *V. hirsute*.

*1. *V. SATIVA*, L. sp. pl. 1037; Roxb. Fl. and 323, III. t. 522; Engl. Bot. t. 334; Schrank Fl. Monac. III. t. 264; Sturm Deutschl. Fl. VIII. t. 31; Alef. in Bonpl. 1861, 71; Hf. Ind. Fl. II. 178.

HAB. Ava, Bhamo (J. Anderson).—Fl. Febr.

Lens, Gren. and Godr.

*1. *L. ESCULENTA*, Moench Meth. 131; Alef. in Bonpl. 1861, 130. (*Ervum Lens*, L. sp. pl. 1039; Koch Syn. Fl. Germ. 172; WA. Prod. I. 235; Schrank Handb. t. 102; Sturm Deutschl. Fl. VIII. t. 32; *Cicer Lens*, Willd. sp. pl. III. 1114; Roxb. Fl. Ind. III. 324).

HAB. Chittagong, cultivated by natives.—Fl. Fr. CS.

Lathyrus, L.

Conspectus of Species.

Leaves reduced to tendril-like petioles; stipules $\frac{3}{4}$ —1 in. long, sagittately ovate; flowers yellow, *L. Aphaca*.

Leaves pinnate, with 1—2 pairs of leaflets; stipules half-sagittate, small; flowers skyblue or white, *L. sativus*.

*1. *L. SATIVUS*, L. sp. pl. 1030; Roxb. Fl. Ind. III. 322; Sibth. Fl. Græc. t. 695; Bot. Mag. t. 115; Koch Syn. Fl. Germ. 174; Hf. Fl. Ind. Fl. II. 179.

HAB. Chittagong, cultivated only.—Fl. Fr. CS.

Pisum, L.

*1. *P. SATIVUM*, L. sp. pl. 1026; Roxb. Fl. Ind. III. 321; Koch Syn. Fl. Germ. 172; Schrank. Fl. Monac. III. t. 261.

Var. *a. SATIVUM*, flowers larger, white; seeds globular or nearly so, pale coloured or green.

Var. *β. ARVENSE*. (*P. arvense*, L. sp. pl. 1027; Koch. Syn. Fl. Germ. 172; Sturm. Deutschl. Fl. II. t. 4; Sibth. Fl. Græc. t. 687; flowers white or pale violet, the wings and keel purple; seeds somewhat depressed angular, greyish, brown- or purple-mottled.

HAB. Var. *a.* Cultivated in Ava, Prome, Pegu, etc.; var. *β.* cultivated in Chittagong.—Fl. Fr. CS.

Abrus, L.*Conspectus of Species.*

Pods $\frac{1}{2}$ — $\frac{1}{3}$ as broad as long, somewhat crumpled; seeds terete, *A. precatorius*.
Pods flat and straight, 4 to 5 times as long as broad; seeds compressed, ... *A. levigatus*.

1. *A. PRECATORIUS*, L. Syst. 533; Roxb. Fl. Ind. III. 257; Bth. Fl. Hongk. 92; Hf. Ind. Fl. II. 175.

HAB. Frequent in the mixed forests, especially the lower and upper ones, but also in hedges, etc., of cultivated lands, all over Burma, from Chittagong and Ava down to Tenasserim.—Fl. Close of RS.; Fr. CS.

2. *A. LEVIGATUS*, E. Mey. Comm. Pl. Afr. 263; Harv. Fl. Cap. II. 263.—(*A. pulchellus*, Wall. Cat. 5819; Baker in Fl. trop. Afr. II. 175 and Fl. Ind. II. 875; *A. melanospermus*, Hassk. Cat. Bog. 282; Miq. Fl. Ind. Bat. I. 159).

HAB. Pegu, Rangoon (Cleghorn); Upper Tenasserim, between Chappedong and Amherst (Wall.).—Fl. Close of RS.; Fr. CS.

N. B. Thwaites' *A. pulchellus* differs by its much larger and broader seeds.

Clitoria, L.*Conspectus of Species.*

× Corolla quite glabrous.

Leaflets in 2 or rarely in a single pair; bractlets roundish, *C. Ternatea*.

× × Standard more or less pilose outside; leaves pinnately 3-foliate.

Calyx glabrous, the teeth much shorter than the tube; bractlets only 2—3 lin. long, linear, subulate-acuminate; flowers by twos, peduncled, *C. Mariana*.

Calyx puberulous, the teeth as long as the tube; bractlets broader and larger, nearly $\frac{1}{2}$ as long as the calyx; flowers by 3—6 clustered in the leaf-axils, *C. Grahamii*.

1. *C. TERNATEA*, L. sp. pl. 1086; Bot. Mag. t. 1542; Roxb. Fl. Ind. III. 321; Hf. Ind. Fl. II. 208.

HAB. Not unfrequent in the mixed forests, more especially the savannah-forests, all over Chittagong and Ava down to Tenasserim; also

in hedges, in shrubbery, along river-sides, etc., of cultivated lands.—Fl. Fr. chiefly RS.

2. *C. GRAHAMII*, Steud. Nomencl. Bot. 2nd ed. ; Bth. in Pl. Jungh. II. 232 in adn.

Var. *α. GRAHAMII* (*C. Grahamii*, Steud. l. c.) elongate, twining, appressed pubescent ; bractlets broader and larger, nearly half as long as the calyx ; leaflets acuminate or sharply acuminate ; calyx-lobes narrower, subulate-acuminate ; pedicels very short, the raceme almost reduced ; standard more pilose outside.

Var. *β. MACROPHYLLA* (*C. macrophylla*, Wall. Cat. 5345 ; Bth. in Linn. Proc. II. 38 ; Hf. Ind. Fl. II. 209), more robust in all parts, the shoots and petioles spreadingly tawny pubescent, glabrescent ; leaves larger, acute or nearly so ; raceme short, often branched ; the rest as in preceding.

HAB. Tenasserim (Helf. 1727), Tavoy (Wall. Cat. 5346) ; Bithoko range, at 3000 ft. elevation (Brandis) ; var. *β.* Ava, Taongdong ; and Prome hills (Wall.)—Fl. Fr. RS.

Shuteria, WA.

Conspectus of Species.

More or less hairy ; racemes sessile, naked ; pods hairy,.....*Sh. vestita*.
All parts (also the pods) quite glabrous ; racemes filiform, furnished with 1 or 2 distant whorls of broad floral leaves,*Sh. suffulta*.

1. *S. VESTITA*, WA. Prod. I. 207 ; Wight Icon. t. 165 ; Hf. Ind. Fl. II. 181.

HAB. Common in grassy places and amongst sunny shrubbery of the drier hill-forests of Ava and Martaban, at 3000 to 5000 ft. elevation, in places descending to 2000 ft.—Fr. HS.

2. *S. SUFFULTA*, Bth. in Pl. Jungh. I. 232 in adn. ; Hf. Ind. Fl. II. 182.

HAB. Frequent in the drier upper mixed and the dry forests, ascending into the drier hill-forest up to 4000 ft. elevation, all over Burma, from Ava and Martaban down to Pegu.—Fl. Close of RS. ; Fr. DS.

Dumasia, DC.

Conspectus of Species.

Young parts, ovary, and pods more or less pubescent,.....*D. villosa*
All parts, also the ovary, glabrous,*D. leiocarpa*.

1. *D. LEIOCARPA*, Bth. in Pl. Jungh. I. 231. (*D. villosa* var. *leiocarpa*, Baker in Hf. Ind. Fl. II. 183).

HAB. Not unfrequent in grasslands and amongst shrubbery of the drier hill- (especially the pine-) forests of the Martaban hills, east of Tounghoo, at 4000 to 5000 ft. elevation.—Fr. March.

Differs from the glabrous Ceylon plant chiefly in the smaller leaves, and in the pods, which are not torulose.

Galactia, P. Br.

Conspectus of Species.

All parts scantily and minutely appressed-pubescent; leaves glabrous above,
 .. *G. tenuiflora*.
 All parts, also the upper side of the leaves, softly but shortly pubescent, .. *G. villosa*.

1. *G. TENUIFLORA*, WA. Prod. I 206; Miq. Fl. Ind. Bat. I. 220; Hf. Ind. Fl. II. 192. (*Glycine tenuiflora*, Willd. sp. pl. III. 1057; Roxb. Fl. Ind. III. 319).

HAB. Ava, Irrawaddi, on the hills opposite the island Loongyi (Wall. Cat. 5520).—Fl. Sept.

2. *G. VILLOSA*, WA. Prod. I. 207; Miq. Fl. Ind. Bat. I. 220. (*G. tenuiflora* var. 3. *villosa*, Bak. in Hf. Ind. Fl. II. 192).

HAB. Ava, Segain, on the limestone hills.—Fr. Nov.

Grona, Bth., vix Lour.

Conspectus of Species.

Leaves 3-nerved at the base, glabrous above; flowers $\frac{1}{2}$ in. long, in lax racemes,
 .. *G. Grahamii*.

Leaves palmately 5-nerved, sparingly hirsute on both sides; flowers 2 lin. long, yellow, solitary on filiform axillary peduncles, *G. filicaulis*.

1. *G. GRAHAMII*, Bth. in Pl. Jungh. I. 233; Hf. Ind. Fl. II. 191.

HAB. Prome hills (Wall.).—Fl. Sept., Octob.

2. *G. FILICAULIS*, Kurz in Journ. As. Soc. Beng. 1873, 232; Hf. Ind. Fl. II. 191.

HAB. Frequent in the low and the savannah-forests of the Irrawaddi plains of Pegu.—Fl. Close of RS.; Fr. CS.

Butea, Roxb.

(*Meizotropis*, Voigt Cat. Hort. Calc. 239; *Megalotropis*, Griff. Not. Dicot. 441.)

Conspectus of Species.

Subg. 1. Butea, Roxb. Corolla very large, orange-scarlet, appressed silk-hairy outside, the keel and standard more or less acute.

× Pods stalked.

Tree; pedicels $\frac{1}{2}$ —1 in. long, *B. frondosa*.

Woody climber; pedicels 1—1 $\frac{1}{2}$ in. long, *B. superba*.

× × Pods sessile.

Erect shrub; corolla only an inch long, *B. minor*.

Subg. 2. Spatholobus, Hassk. Corolla small, white or purple, glabrous keel and standard more or less blunt. Woody climbers.

Leaves large, beneath appressed silvery pubescent; pods stalked; flowers white,
 .. *B. parviflora*.

Leaves small, glabrous to the naked eye; pods sessile; flowers white, *B. acuminata*.

1. *B. FRONDOSA*, Roxb. Corom. Pl. I. t. 21 and Fl. Ind. III. 244; Hook. Bot. Misc. III. 102, and Wight Ill. Ind. Bot. Suppl. 57. t. 32; Bedd. Fl. Sylv. t. 176; Hf. Ind. Fl. II. 194.

HAB. Frequent in the lower mixed and the dry forests, more especially however in the savannah-forests and entering even the tidal savannahs; all over Burmah, from Ava and Martaban down to Tenasserim.—Fl. March, Apr.; Fr. Apr., May.

2. *B. SUPERBA*, Roxb. Corom. Pl. I. t. 22. and Fl. Ind. III. 247; Hf. Ind. Fl. II. 195.

HAB. Frequent in the mixed forests, especially the upper ones, all over Burmah, from Arracan, Prome, and Martaban down to Upper Tenasserim.—Fl. March, Apr.; Fr. May, June.

3. *B. PARVIFLORA*, Roxb. Fl. Ind. III. 248; WA. Prod. I. 261; Wight Icon. t. 210. (*Spatholobus Roxburghii*, Bth. in Pl. Jungh. I. 238 in adn.; Hf. Ind. Fl. II. 193).

HAB. Frequent in all mixed forests, especially the upper ones, entering also occasionally the tropical and open forests; all over Chittagong, Pegu, and Martaban down to Tenasserim.—Fl. Febr.—Apr.; Fr. DS.

4. *B. ACUMINATA*, Wall. Cat. 5443. (*Spatholobus acuminatus*, Bth. in Pl. Jungh. I. 238 in adn.; Hf. Ind. Fl. II. 194).

HAB. Frequent in the tropical forests all over Pegu and Martaban down to Tenasserim; also Chittagong.—Fl. Fr. HS.

Erythrina, L.

Conspectus of Species.

* *Wings of corolla much longer than the spathaceous calyx.*

× Pod bearing the few seeds at or towards the narrowed end only, the lower sterile part greatly dilated as in *Butea*.

Subg. 1. Hypaphorus, Hassk. Pods dehiscing at both sutures, the pilated sterile part contracted into a stalk 1—2 in. long. Seeds 1—3, free. Flowers almost sessile.

Standard glabrous; keel-petals wholly connate, obcordate and shortly acuminate in the sinus, *E. lithosperma*.

Standard minutely velvety; keel consisting of 2 obliquely oblong rather acute petals united at the middle only, *E. holosericea*.

× × Pod many-seeded, seed-bearing from the base.

Subg. 2. Duchassaingia, Walp. Pods flat, torulose, opening only along the sinuate outer suture, the dorsal suture prominent and straight. Seeds free, but usually separated by spurious spongy septa.

Glabrous, glaucous; standard broad, notched; pods minutely greyish-velvety, .. *E. ovalifolia*.

Subg. 3. Stenotropis, Hassk. Pods torulose and almost moniliform, the valves opening at both sutures and exposing the continuous pithy-chartaceous indehiscent endocarp enclosing the seeds.

Glabrous; leaves membranous or chartaceous; pods glabrous, *E. Indica*.
 * * Wings of corolla minute, as long as or shorter than the
spathaceous calyx.

Subg. 4. Micropteryx, Walp. Pods follicle-like opening along the ventral suture, continuous. Seeds free.

Leaves rigidly chartaceous or almost coriaceous, more or less shortly tomentose or puberulous beneath; calyx spathaceously 2-lobed, *E. suberosa*.
 Leaves chartaceous, glabrous, acuminate; calyx spathaceous, *E. stricta*.

1. *E. LITHOSPERMA*, Miq. Fl. Ind. Bat. I. 209, vix Bl.; Hf. Ind. Fl. II. 190. (*E. Sumatrana*, Miq. Suppl. Fl. Sum. 304).

HAB. Frequent on the small savannahs along hill-streams, river-sides, etc., in the vicinity of tropical forests, all over the Pegu Yomah and the Martaban hills.—Fl. Jan., Febr.; Fr. March, Apr.

The subgenera of *Erythrina* are better marked than many of the other Leguminous genera generally adopted by botanists. But here, like in *Sterculia*, the great uniformity of habit seems to be in favour of their reduction.

2. *E. HOLOSERICEA*, Kurz in Journ. As. Soc. Beng. 1873. 69.

HAB. Pegu, Tharrawaddi District (Dr. Adamson).

A curious species, the flowers of which much resemble those of *E. ovalifolia*, while the leaves (if they really belong to the flowers) are those of *E. lithosperma*.

3. *E. OVALIFOLIA*, Roxb. Fl. Ind. III. 254; Wight Icon. t. 247; Hf. Ind. Fl. II. 189. (*Duchassaingia ovalifolia*, Walp. in Linn. XXIII. 742).

HAB. Frequent in the tidal forests and the tidal savannahs of Lower Pegu; often also cultivated in villages.—Fl. Febr., March.

4. *E. INDICA*, Lamk. Encycl. Meth. II. 391; Roxb. Fl. Ind. III. 249; Wight Icon. t. 58; Hf. Ind. Fl. II. 188. (*E. bisetosa*, Griff. Not. Dicot. 441).

HAB. Frequent in the beach-forests all along the coasts of Burmah and the adjacent islands; recurs in the dry Prome District but there very rare; often planted in villages.—Fl. March, Fr. June, Sept.

5. *E. SUBEROSA*, Roxb. Fl. Ind. III. 253; Hf. Ind. Fl. II. 189. (*Micropteryx suberosa*, Walp. in Linn. XXIII. 744).

HAB. Not unfrequent in the upper mixed forests of the Pegu Yomah.—Fl. March, Apr.

6. *E. STRICTA*, Roxb. Fl. Ind. III. 251; WA. Prod. I. 260; Bedd. Fl. Sylv. t. 175; Hf. Ind. Fl. II. 189. (*Micropteryx stricta*, Walp. in Linnaea XXIII. 740).

HAB. Frequent in the upper mixed forests of the Pegu Yomah and the Martaban hills, east of Tounghoo.—Fl. March, Apr.; Fr. May, June.

Mucuna, Adans.*Conspectus of Species.**** Pods winged along the sutures, or lamellate, or both.**

Subg. 1. Citta, Lour. Pods transversely and obliquely lamellate on the valves, but not winged on the sutures. Seeds orbicular.

Racemes corymb-like, short-peduncled; pods 1-seeded, *M. monosperma*.

Subg. 2. Carpopogon, Roxb. Sutures of pod dilated into broad wings, the valves smooth on the faces. Seeds orbicular.

Flowers yellowish or white; pod 3—4 in. long, appressed tawny setose, .. *M. gigantea*.

*** * Pods without sutural wings, the valves either quite plain, or longitudinally ribbed only on the faces.**

Subg. 3. Stizolobium, Pers. Characters as above. Pods often longitudinally ribbed on the sutures.

× Pods stalked, glabrescent, torose. Seeds orbicular.

Arboreous climber; flowers variegated dark-purple; pod 1—3 ft. long, plain, .. *M. macrocarpa*.

× × Pods sessile, plain or longitudinally ribbed. Seeds transversely oblong.

+ Pods densely setose, not glabrescent. Flowers purple.

Peduncle naked; flowers arising from a knob; pods with two longitudinal ribs along the upper suture; leaves pubescent beneath, *M. pruriens*.

Peduncle bracted; flowers from a secondary peduncle about 2 lin. long; pod without ribs; leaves almost glabrous, *M. bracteata*.

+ + Pods velvety, glabrescent. Flowers white.

Pods longitudinally ribbed, $\frac{1}{2}$ ft. long, *M. nivea*.

1. *M. MONOSPERMA*, DC. Prod. II. 406; Wight in Hook. Bot. Misc. II. 346. suppl. t. 12, and Icon. t. 35; Hf. Ind. Fl. II. 185. (*Carpopogon monospermum*, Roxb. Fl. Ind. III. 283; *M. anguina*, Wall. Pl. As. rar. III. t. 236).

HAB. Frequent in the mixed forests, especially the lower ones, all over Pegu, Chittagong, and Arracan; also Tenasserim, Tavoy.—Fl. Close of RS.; Fr. DS.

2. *M. GIGANTEA*, DC. Prod. II. 405; Wight in Hook. Bot. Misc. II. 257; Suppl. t. 14; Hf. Ind. Fl. II. 186. (*Dolichos giganteus*, Willd. sp. pl. III. 287; *Carpopogon giganteum*, Roxb. Fl. Ind. III. 287).

HAB. Frequent along the sea-coast, especially in the beach-jungles, of the Andaman islands; also Tenasserim.—Fl. Fr. DS.

3. *M. MACROCARPA*, Wall. Pl. As. rar. I. 41. t. 47; Hf. Ind. Fl. II. 186.

HAB. Not unfrequent in the hill-forests, especially the drier ones, and in the pine forests of Martaban east of Tounghoo, at 4000 to 6000 ft. elevation; also Ava hills.—Fl. March; Fr. HS.

4. *M. PRURIENS*, DC. Prod. II. 405; Hf. Ind. Fl. II. 187. (*M. prurita*, Hook. Bot. Misc. II. 257. Suppl. t. 13; Bot. Mag. t. 4945;

Carpopogon pruriens, Roxb. Fl. Ind. III. 283; *Dolichos pruriens*, L. sp. pl. 1020, quoad plant. Asiat.; M. utilis, Wall.; Wight Icon. t. 280).

HAB. Frequent in all leaf-shedding forests, especially the lower ones, in hedges, shrubbery, etc., around villages, and along river-sides of the plains, all over Pegu and Prome; also Ava.—Fl. Close of RS.; Fr. C. and HS.

5. *M. BRACTEATA*, DC. Prod. II. 406; Kurz in Journ. As. Soc. Beng. 1873, 231; Hf. Ind. Fl. II. 186. (*Carpopogon bracteatum*, Roxb. Hort. Beng. 54).

HAB. Frequent in shrubbery along choungs in the tropical forests of Pegu and Martaban, ascending into the pine forests up to 4000 ft. elevation; also Ava and Chittagong.—Fl. CS.; Fr. HS.

N. B. A probably new species has been collected by Dr. Brandis somewhere in Pegu which is very near to *M. atropurpurea*, DC., and, indeed, has the same flowers. It differs in the long cuspidate leaflets, slender and short racemes, the lower persistent bracts, which are concave-ovate, long-acuminate, and about an inch long; and the lanceolate, acuminate calyx-lobes.

6. *M. NIVEA*, DC. Prod. II. 406; Hf. Ind. Fl. II. 188. (*Carpopogon niveum*, Roxb. Fl. Ind. III. 285).

HAB. Ava (*teste* Baker).

Pachyrrhizus, Rich.

1. *P. BULBOSUS*, (*Dolichos bulbosus*, L. sp. pl. 1020; Roxb. Fl. Ind. III. 309; *P. angulatus*, Rich. ap. DC. Mém. Leg. IX 379; DC. Prod. II. 402; Hf. Ind. Fl. II. 207).

HAB. Frequently cultivated all over Burma.—Fl. Close of R. S. and CS.; Fr. CS.

Vigna, Savi.

Conspectus of Species.

* *Stipules not peltately attached. Keel prolonged into a distinct beak.*

× Ovary and pods (at least while young) more or less pubescent to tomentose. Flowers purple or blue.

O Seeds velvety.

Habit of the following; pods 2—3 in. long by $\frac{1}{2}$ broad, densely silky villous, .. *V. dolichoides*.

O O Seeds glabrous.

Flowers about $\frac{1}{2}$ in. long, forming short-peduncled many-flowered racemes; pods densely brown hirsute, $2\frac{1}{2}$ —3 lin. broad by 4—5 in. long, *V. pilosa*.

Flowers about an inch long or longer, by 2—4 terminating the long peduncles; pod glabrescent, *V. vexillata*.

× Ovary and pods glabrous. Flowers yellow.

O Leaflets obovate, blunt or almost retuse.

Quite glabrous; corolla about $\frac{1}{2}$ in. long; pods 1— $1\frac{1}{2}$ in. long, *V. lutea*.

O O Leaflets from ovate to ovate-lanceolate, acuminate to acute.

Flowers by 1—2 on very short paired peduncles, *V. repens*.
 Racemes many-flowered, long-peduncled; stipules small, almost peltately falcate-ovate,
 .. *V. luteola*.

* * *Stipules peltately attached, the lower end produced.*

× Keel not prolonged into a beak. Flowers yellow.

Pods 1—2 in. long by $1\frac{1}{2}$ —2 lin. broad, minutely puberulous, soon glabrous; seeds
 glossy; stipules oblong, the produced basal part falcate-ovate, *V. calcarata*.
 Pods rather blunt at both ends, up to an in. long by $2\frac{1}{2}$ lin. broad, sparingly but long-
 hirsute; seeds opaque; stipules peltately linear-oblong, 3—4 lin. long,
 .. *V. brachycarpa*.

× × Keel prolonged into a distinct beak. Flowers blue or white, or
 variegated in these colours.

Pods 2—3, or 4—12 in. long by 2—4 lin. broad, glabrous; stipules shortly peltate,
 lanceolate, *V. Sinensis*.

1. *V. DOLICHOIDES*, Bak. in Hf. Ind. Fl. II. 206. (*Phaseolus doli-
 choides*, Roxb. Fl. Ind. III. 290; *Canavalia dolichoides*, Kurz in Journ.
 As. Soc. Beng. 1874. 185. sub No. 14).

HAB. Not unfrequent in the upper mixed forests of Chittagong and
 Arracan, especially along chounghs.—Fl. Close of RS.; Fr. DS.

2. *V. PILOSA*, Bak. in Hf. Ind. Fl. II. 207. (*Dolichos pilosus*,
 Klein in Willd. sp. pl. III. 1043; Roxb. Fl. Ind. III. 312).

HAB. Prome (Wall. Cat. 5599 C.); Pegu, above Rangoon (Cleg-
 horn).—Fl. Close of RS.; Fr. CS.

3. *V. VEXILLATA*, Bth. in Mart. Fl. Bras. XXIV. 194. t. 50. f. 1.;
 Hf. Ind. Fl. II. 206. (*Phaseolus vexillatus*, L. sp. pl. 1017; Jacq. Hort.
 Vindob. t. 102; *V. hirta*, Hook. Icon. plant. t. 637; *Phaseolus Pulniensis*,
 Wight Icon. t. 202).

HAB. Rather scarce in savannahs along the chounghs in the upper
 mixed forests of the Pegu Yomah.—Fl. CS.

4. *V. LUTEA*, A. Gray in Bot. Amer. Expl. I. 454; Bth. Fl. Austr.
 II. 259; Hf. Ind. Fl. II. 205.

HAB. Frequent on the sand-beaches and in the beach-forests all along
 the coast of Tenasserim and the Andamans.—Fl. C. and HS.; Fr. HS.

5. *V. REPENS*, Bak. in Hf. Ind. Fl. II. 205.

HAB. Prome (Wall.). Not seen by me.

6. *V. LUTEOLA*, Bth. in Mart. Fl. Bras. Pap. 194. t. 50. f. 2 and Fl.
 Austr. II. 260. (*Dolichos luteolus*, Jacq. Hort. Vindob. I. 39. t. 90; *Do-
 lichos Gangeticus*, Roxb. Fl. Ind. III. 310).

HAB. Ava, Bhamo (J. Anderson).—Fl. Febr.

Baker refers my Burmese specimens (No. 2526) to this species, but
 they differ greatly in the stipules, and are referred by me to the following
 species.

7. *V. CALCARATA*, (*Phaseolus calcaratus*, Roxb. Fl. Ind. III. 289;
 WA. Prod. I. 245; Hf. Ind. Fl. II. 203?).

HAB. Common in the savannahs and in grass-land, also amongst sunny shrubbery and in cultivated lands, all over Pegu, Arracan, and Martaban.—Fl. Fr. DS.

8. V. BRACHYCARPA, Kurz in Journ. As. Soc. Beng. 1874. 185; Hf. Ind. Fl. II. 206.

HAB. Arracan, upper mixed forests in the Akyab District.—Fl. Fr. Close of RS.

*9. V. SINENSIS, Savi Dissert.; Miq. Fl. Ind. Bat. I. 187. (*Dolichos Sinensis*, L. Amæn. Acad. IV. 326; Roxb. Fl. Ind. III. 302; WA. Prod. I. 251; Bot. Mag. t. 2232; *Dolichos Tranquebaricus*, Jacq. Hort. Vindob. III. t. 70; *Dolichos Catjang*, L. Mart. 259; Roxb. Fl. Ind. III. 303; V. *Catjang*, Endl. ap. Miq. Fl. Ind. Bat. I. 188; Hf. Ind. Fl. II. 205).

HAB. Generally cultivated all over Burma and adjacent islands.—Fl. Fr. DS.

Phaseolus, L.

Conspectus of Species.

Subg. 1. *Eu-phaseolus*. Stipules small, basifix and not or hardly produced downwards.

* *Pods dimidiate, oblong or linear, 2—many-seeded. Flowers purple to lilac and white.*

Flowers small, greenish white, on filiform puberulous pedicels; calyx shallow, 2 lin. wide and barely a line deep; pods falcate, 2—3 in. long by $\frac{1}{2}$ broad, glabrous, *P. lunatus*. Flowers purplish, middling sized, on slender glabrous pedicels; calyx about 2 lin. deep and nearly as wide, ribbed; pods $1\frac{1}{2}$ —2 in. long by 3—4 lin. broad, *P. tenuicaulis*.

* * *Pods neither dimidiate nor falcate, linear to narrow-linear, 4—many-seeded. Flowers purple to white.*

× Bractlets oval, persistent, as long as or longer than the calyx.

Racemes few-flowered; pedicels longer than the calyx; pods linear, 4—6-seeded, .. *P. vulgaris*.

× × Bractlets deciduous, shorter than the calyx. Flowers shortly pedicelled.

Corolla nearly an inch long; calyx plain; pods many-seeded, $\frac{1}{3}$ in. broad,

.. *P. adenanthus*.

Corolla about $\frac{1}{2}$ in. long; calyx almost 5-ribbed; pods many-seeded, 2 lin. broad or narrower, *P. semierectus*.

Subg. 2. *Strophostyles*, Ellis. Stipules peltately attached and produced downwards. Flowers yellow or greenish yellow. Bracts very deciduous.

* *Ovary and pods glabrous.*

Prostrate or half-twining; stipules large and leafy, about $\frac{1}{2}$ in. long; leaflets more or less deeply lobed, *P. trilobus*.

* * *Ovary pubescent to hirsute.*

Twining, the stems spreadingly hirsute; pedicels $1-1\frac{1}{2}$ lin. long; pods thinly and shortly hirsute, *P. trinervius*.

Erect or nearly so, hirsute to almost glabrous; flowers almost sessile; pods sparingly but long-hirsute, *P. radiatus*.

*1. *P. LUNATUS*, L. sp. pl. 1016; Roxb. Fl. Ind. III. 286; Wight Icon. t. 755; Bak. in Fl. trop. Afr. 193 and Ind. Fl. II. 200.

HAB. Ava, apparently cultivated.—Fl. Febr.

2. *P. TENUICAULIS*, Bak. in Hf. Ind. Fl. II. 201. (*Dolichos tenuicaulis*, Grah. in Wall. Cat. 5598 D.)

HAB. Prome (Wall.); Ava, hills east of Bhamo (J. Anderson).—Fl. Aug.

*3. *P. VULGARIS*, L. sp. pl. 1016; Roxb. Fl. Ind. III. 287; Bth. in Mart. Fl. Bras. Papil. 182; Hf. Ind. Fl. II. 200.

Var. β . *NANUS*, Koch. Syn. Fl. Germ. I. 178. (*P. nanus*, L. sp. pl. 1017; Roxb. Fl. Ind. II. 291; WA. Prod. I. 243), dwarf and erect.

HAB. Here and there cultivated in gardens, chiefly in Chittagong.

4. *P. ADENANTHUS*, E. Mey. Prim. Flor. Esseq. 239; Bak. in Fl. trop. Afr. II. 192 and Ind. Fl. II. 200. (*P. rostratus*, Wall. Pl. As. rar. I. t. 63; Wight Icon. t. 34; *P. alatus*, Roxb. Fl. Ind. III. 288, non L.).

HAB. Ava and Prome, on the hills bordering the Irawaddi (Wall.); Tenasserim (Helf.).—Fl. Close of RS. and CS.; Fr. HS.

5. *P. SEMIERECTUS*, L. sp. pl. 1016; Jacq. Icon. t. 558; Böt. Reg. t. 743; Hf. Ind. Fl. II. 201. (*P. psoraleoides*, WA. Prod. I. 246; Wight Icon. t. 249).

HAB. Chittagong, in grass-land.—Fl. CS.; Fr. C. and HS.

6. *P. TRILOBUS*, Ait. Hort. Kew. III. 30; Roxb. Fl. Ind. III. 298; Wight Icon. t. 94; Hf. Ind. Fl. II. 201. (*Glycine triloba*, L. Mant. 516; *Dolichos trilobatus*, L. Mant. 516; Burm. Fl. Ind. t. 50. f. 1).

HAB. Burma (according to Revd. F. Mason).

7. *P. TRINERVIUS*, Heyne ap. WA. Prod. I. 245; Bak. in Fl. trop. Afr. II. 193 and in Ind. Fl. II. 203.

HAB. Not unfrequent in the savannahs of Martaban, east of Toung-hoo, and elsewhere; also Upper Tenasserim.—Fl. Fr. March, Apr.

*8. *P. RADIATUS*, L. sp. pl. 1017; Roxb. Fl. Ind. III. 296; Miq. Fl. Ind. Bat. I. 197.

Var. α . *RADIATUS*, (*T. radiatus*, L. l. c.; *P. Mungo*, L. var. *radiatus*, Bak. in Hf. Ind. Fl. II. 203), more or less spreading and twining; pods shorter and more blunt.

Var. β . *MUNGO*, (*P. Mungo*, L. Mant. 101; Roxb. Fl. Ind. III. 292; Hf. Ind. Fl. II. 203; *P. max*, Roxb. Fl. Ind. III. 295), dwarf and erect; pods longer, narrower, and acuminate; seeds green or black. Of this there is also an almost glabrous form.

HAB. Var. β . generally cultivated all over Burma.—Fl. CS.; Fr. Begin of HS.

Dolichos, L.*Conspectus of Species.*

Flowers by 1—3 clustered in the leaf-axils; calyx-teeth about so long as the tube;
corolla yellow,.....*D. biflorus*.

Flowers by 1 or 2 on a short axillary peduncle; calyx-teeth shorter than the tube;
corolla reddish?.....*D. lanceolatus*.

1. *D. BIFLORUS*, L. sp. pl. 1023; Roxb. Fl. Ind. III. 313; Hf. Ind. Fl. II. 210. (*Glycine uniflora*, Dalz. in Journ. Linn. Soc. XIII. 146 cum icon.).

HAB. Ava (*teste* Baker).

2. *D. LANCEOLATUS*, Grah. in Wall. Cat. 5547; Hf. Ind. Fl. II. 210.

HAB. Prome Hills (Wall.).—Fl. Sept. Octob.

Lablab, Savi.

*1. *L. VULGARIS*, Savi Dissert. 19. f. 8. a—c.; Wight Icon. t. 57. and 203. (*Dolichos Lablab*, L. sp. pl. 1019; Roxb. Fl. Ind. III. 305; Bot. Mag. t. 896; Hf. Ind. Fl. II. 209.; *Dolichos purpureus*, L. sp. pl. 1021; Smith Exot. Fl. t. 74; Bot. Reg. t. 830; *Dolichos Bengalensis*, Jacq. Hort. Vindob. II. t. 124; *Dolichos lignosus*, Roxb. Fl. Ind. III. 307; Bot. Mag. t. 380).

HAB. Generally cultivated in several varieties all over Burma and the adjacent islands.—Fl. Fr. CS.

Psophocarpus, Neck.*Conspectus of Species.*

Bractlets shorter than the calyx; pods up to a foot long, 12—16 seeded,

..*P. tetragonolobus*.

Bractlets as long or longer than the calyx; pods 2—3 in. long, often only 5—6-seeded,

..*P. palustris*.

*1. *P. TETRAGONOLOBUS*, DC. Prod. II. 403; Hf. Ind. Fl. II. 211. (*Dolichos tetragonolobus*, L. sp. pl. 1021?).

HAB. Prome and Martaban; cultivated accord. Revd. F. Mason.

*2. *P. PALUSTRIS*, Desv. in Ann. d. sc. nat. IX. 420; Hf. Ind. Fl. II. 212. (*Diesingia scandens*, Endl. Atakt. I. t. 1—2; *P. longepedunculatus*, Hassk. Pl. Jav. rar. 388; Bak. in Fl. trop. Afr. II. 208; *Dolichos tetragonolobus*, Roxb. Fl. Ind. III. 305, non Linn.?).

HAB. Frequently cultivated all over Burma; growing also like wild in the savannahs around villages along the Irrawaddi river.—Fl. Oct. Jan.; Fr. C. and HS.

Canavalia, Adans.

Conspectus of Species.

Subg. 1. Eu-canavalia. Pods more or less dimidiate, with 2 parallel wings along the upper suture, glabrous or glabrescent.

* *Seeds an inch long or slightly longer.*

Pods $\frac{1}{2}$ —2 feet long, linear-oblong; seeds red or white, *C. ensiformis*.

* * *Seeds only $\frac{1}{2}$ in. long.*

Leaflets shortly acuminate or apiculate; standard an inch long; seeds light grey, *C. virosa*.

Leaflets apiculate; standard $\frac{3}{8}$ in. long or shorter; seeds dark brown, *C. turgida*.

Leaflets oboval, retuse or rounded; standard an inch long; seeds grey, .. *C. obtusifolia*.

Subg. 2. Dysolobium, Bth. Pods terete, straight or slightly curved, obtusely 2-keeled along both sutures, but not winged, densely hirsute to velvety.

Shortly pubescent; corolla an inch long or longer; style bearded; pods velvety, *C. grandis*. Glabrescent; corolla hardly $\frac{1}{2}$ in. long; pod as in preceding, but more densely velvety,

style villous round the stigma, *C. lucens*.

*1. *C. ENSIFORMIS*, DC. Prod. II. 404; Bot. Mag. t. 4027; Bak. in Fl. trop. Afr. II. 190 and Ind. Fl. II. 195. (*Dolichos ensiformis*, L. sp. pl. 1022; *C. gladiata*, DC. l. c.; Wight Icon. t. 753; *Dolichos gladiatus*, Jacq. Icon. rar. III. t. 560; Roxb. Fl. Ind. III. 300).

Var. *a. ERYTHROSPERMA*, Voigt Hort. Calc. 234, seeds red; flowers red or white.

Var. *β. LEUCOSPERMA*, Voigt Hort. Calc. 234, seeds and flowers white; pods about 2 feet long.

HAB. Generally cultivated all over Burma, especially in the plains; often springing up in poonzohs and neglected gardens.—Fl. RS.; Fr. CS.

2. *C. VIROSA*, WA. Prod. I. 253; Miq. Fl. Ind. Bat. I. 216. (*Dolichos virosus*, Roxb. Fl. Ind. III. 301; *C. ensiformis*, var. 1. *virosa*, Bak. in Hf. Ind. Fl. II. 196).

HAB. Amongst shrubbery along the outskirts of the upper mixed forests along the Arracan coast, and most probably elsewhere.—Fl. Close of RS.; Fr. Jan.

3. *C. TURGIDA*, Grah. in Wall. Cat. 5534; Miq. Fl. Ind. Bat. I. 215. (*C. ensiformis*, var. 2. *turgida*, Bak. in Hf. Ind. Fl. II. 196).

HAB. Frequent in the leaf-shedding forests, and more especially in shrubbery along streamlets, in hedges, etc., all over Burma, from Chittagong and Prome down to Tenasserim and the Andamans.—Fl. Close of RS.; Fr. CS.

4. *C. OBTUSIFOLIA*, DC. Prod. II. 404; Clegh. in Madr. Journ. new ser. I. t. 4; Hf. Ind. Fl. II. 196. (*Dolichos rotundifolius*, Vhl. Symb. II. 81; Roxb. Fl. Ind. III. 302).

HAB. Common on the sand-beaches all along the coasts of Arracan and the Andamans.—Fl. Close of RS.; Fr. CS.

5. C. GRANDIS, Kurz in Journ. As. Soc. Beng. 1874. 185 sub No. 14. (*Phaseolus grandis*, Wall. Cat. 5602; Bth. in Pl. Jungh. I. 239 in adn.; *Phaseolus velutinus*, Bak. in Hf. Ind. Fl. III. 204).

HAB. Chittagong; Ava, Taong-dong and Khakyen hills; Tenasserim, Moulmein; Pegu (*teste* Baker).—Fl. Close of RS.; Fr. HS.

6. C. LUCENS, Kurz in Journ. As. Soc. Beng. 1874. 185 sub No. 14. (*Phaseolus lucens*, Wall. Cat. 5601; Bth. in Pl. Jungh. I. 239 in adn.; *Vigna lucens*, Bak. in Hf. Ind. Fl. II. 207).

HAB. Frequent in the mixed forests, especially the upper ones, entering also the tropical forests, from Chittagong, Pegu, and Martaban down to Tenasserim.—Fl. Close of RS.; Fr. HS.

Dioclea, HBK.

1. D. REFLEXA, Hook. Fl. Nigr. 306; Bak. in Fl. trop. Afr. II. 189; Hf. Ind. Fl. II. 196. (*Dolichos hexandrus*, Roxb. Hort. Bengh. 55. and MS. Icon. XX. t. 134).

HAB. Tenasserim (Helf. 1752).

Pueraria, DC.

Conspectus of Species.

Subg. 1. Eu-pueraria. Woody leaf-shedding climbers. Pods constricted between the seeds. Roots large, tuberous. Flowers pale blue.

Calyx densely silky; bractlets minute; pods tawny hirsute while young, ..*P. tuberosa*.
Calyx minutely appressed pubescent; bractlets as long as the buds; pods minutely appressed pubescent, soon glabrous,*P. Candollei*.

Subg. 2. Neustanthus, Bth. Undershrubs or shrubs, erect or twining. Pods not constricted between the seeds.

* *Erect shrubs or undershrubs, the branchlets terete or nearly so.*

× Bracts deciduous.

Tomentum of young parts, inflorescence, and calyx tawny; pods 2—3 in. long,

.....*P. composita*.

All parts nearly glabrous; calyx minutely velvety; pods $1\frac{1}{2}$ —2 in. long; flowers white,

.....*P. Wallichii*.

× × Bracts persistent.

Leaves sparingly appressed hirsute; fruiting pedicels 2 lin. long; pods $1-1\frac{1}{2}$ in. long, glabrous,*P. stricta*.

* * *Twining or prostrate herbs or undershrubs. Flowers purplish blue.*

× Pods narrowly linear, $1\frac{1}{2}$ —3 in. long by 2 lin. broad, many-seeded.

O Bracts deciduous. Branchlets terete or nearly so. Leaflets often lobed. Extensive twiners (*Schizophyllon*, Baker.)

Calyx about $2\frac{1}{2}$ lin. long, the lobes acuminate; corolla about 5 lin. long, *P. phaseoloides*.

Calyx about 4 lin. long, the lobes subulate-acuminate; corolla $\frac{3}{4}$ in. long,

.....*P. subspicata*.

O O Bracts persistent. Branchlets somewhat angular. Prostrate or twining perennial herbs.

Pods long but thinly hirsute, *P. anabaptista*.
 × × Pods oblong to linear-oblong, $\frac{1}{2}$ —1 in. long by $2\frac{1}{2}$ — $3\frac{1}{2}$ lin. broad,
 flat or torose. Branchlets sharply angular, retrorsely pubescent on
 the angles.

Pods flat or nearly so, sparingly but long and spreadingly hirsute, 2—4-seeded; calyx
 small, *P. hirsuta*.

Pods torose, shortly and sparingly appressed hirsute, 5—6-seeded; calyx nearly a line
 long, *P. brachycarpa*.

1. *P. TUBEROSA*, DC. Prod. II. 240; Wight Icon. t. 412; Hf. Ind. Fl. II. 197. (*Hedysarum tuberosum*, Roxb. Fl. Ind. III. 363).

HAB. Chittagong.—Fl. March, Apr.; Fr. May, June.

2. *P. CANDOLLEI*, Grah. in Wall. Cat. 5355; Hf. Ind. Fl. II. 197.

HAB. Common in the mixed forests, especially the upper ones, all over Burma, from Ava and Martaban down to Tenasserim.—Fl. March, Apr.; Fr. May, June.

Stands in a similar relationship to the preceding species as *Millettia extensa* does to *M. macrophylla*, and is barely more than a glabrous variety of it.

3. *P. WALLICHII*, DC. Prod. II. 240, and Mém. Legum. t. 43: Hf. Ind. Fl. II. 198.

Var. *a. GENUINA*, all parts nearly glabrous; calyx minutely velvety; pods $1\frac{1}{2}$ —2 in. long; flowers white.

Var. *β. COMPOSITA*, Bth. in Linn. Proc. IX. 124. (*P. composita*, Grah. in Wall. Cat. 5570), tomentum of the young parts, and of the inflorescence and calyx, of a tawny colour; pods 2—3 in. long; flowers apparently purple.

HAB. Var. *a.* Burma (teste Benth.); var. *β.* frequent in the drier hill-forests, especially the pine-forests, of Martaban, east of Tounghoo, at 3500 to 5000 feet. elevation; Ava, Taong-dong (Wall).—Fr. March.

I think that var. *β.* will have to be separated specifically.

4. *P. STRICTA*, Kurz in Journ. As. Soc. Beng. 1873, 254; Hf. Ind. Fl. II. 198.

HAB. Rather frequent in the hill-eng and the upper dry-forests, rare in the drier upper mixed forests of the Pegu Yomah and the Martaban hills, at 1000—3000 feet elevation.—Fr. DS.

5. *P. PHASEOLOIDES*, Bth. in Proc. Linn. Soc. IX. 125; Hf. Ind. Fl. II. 199 excl. syn. Bth. (*Dolichos phaseoloides*, Roxb. Fl. Ind. III. 316).

HAB. In hedges and light woods of Pegu (Maclelland); Prome (Wall.); probably all over the country.—Fl. Close of RS.; Fr. DS.

6. *P. SUBSPICATA*, Bth. in Proc. Linn. Soc. IX. 125.

HAB. Frequent in the mixed, especially the savannah-forests, of Arracan and Pegu; also Tenasserim, Tavoy.—Fl. Close of RS.; Fr. CS.

7. *P. ANABAPTISTA* (*Shuteria hirsuta*, Bak. in Hf. Ind. Fl. II. 182?).

Var. *a.* GENUINA, branches, petioles, etc., spreadingly tawny hirsute; pods similarly hirsute while unripe; flowers purple.

Var. *β.* GLABRESCENS, branches, petioles, and also the pods thinly appressed hirsute, the last shorter and almost glabrescent; flowers pale lilac, violet at the tips.

HAB. Both varieties rather frequent in the upper mixed forests, along choungs, also in hill-toungyas, of the Pegu Yomah; also Ava, Khakyen Hills.—Fl. begin of CS.; Fr. HS.

Var. *β.* may be distinct and stands in a similar relation to the normal form as *P. Candollei* does to *P. tuberosa*. The species is also common in the Sikkim Himalaya.

8. *P. HIRSUTA*, Kurz in Journ. As. Soc. Beng. 1873, 254; Hf. Ind. Fl. II. 199.

HAB. Not rare in the drier upper mixed forests of the western slopes of the Pegu Yomah, up to 3000 feet elevation.—Fr. Jan.

9. *P. BRACHYCARPA*, Kurz in Journ. As. Soc. Beng. 1873. 232 and 1874. 185; Hf. Ind. Fl. II. 199.

HAB. Rare in the drier upper mixed forests of the central parts of the Pegu Yomah.—Fr. Jan.

Teramnus, Spreng.

Conspetus of Species.

* *Pods more or less torose, tawny hirsute.*

Seeds opaque; inflorescence and young branches spreadingly tawny pilose; calyx-teeth as long as the tube, *T. mollis*.

* * *Pods glabrous to the naked eye.*

× Flowers in racemes.

Racemes appressed silk-hairy; calyx-teeth as long as the tube; seeds glossy; leaflets up to $1\frac{1}{2}$ in. long, not acuminate, *T. labialis*.

Racemes long-peduncled, almost glabrous; leaflets obovate, retuse, *T. Wallichii*.

Racemes appressed silk-hairy; calyx-teeth shorter than the calyx-tube; seeds quite opaque; leaves 2—4 in. long, acuminate, *T. flexilis*.

× × Flowers by 2—4, axillary.

Habit of *T. flexilis*; corolla $\frac{1}{2}$ in. long; unripe pods $1\frac{1}{2}$ in. long, flat, glabrous.

.. *T. oxyphylla*.

1. *T. MOLLIS*, Bth. in Linn. Proc. VIII. 265. (*Glycine mollis*, WA. Prod. I. 208; *Glycine debilis*, Roxb. Fl. Ind. III. 317, viz Aiton).

HAB. Frequent in the drier upper mixed forests all over the Pegu Yomah.—Fl. RS.; Fr. CS.

2. *T. LABIALIS*, Spreng. Syst. veget. II. 235; Bth. in Linn. Proc. VIII. 265; Hf. Ind. Fl. II. 184, in part. (*Glycine labialis*, L. suppl. 325; Roxb. Fl. Ind. III. 315; Wight Icon. t. 168).

HAB. Frequent in savannahs and savannah-forests, also in hedges,

shrubby and neglected culture-land, of Chittagong and Arracan; probably also elsewhere.—Fl. Fr. RS.

3. T. WALLICHII, (*Desmodium Rottleri*, Bak. in Hf. Ind. Fl. II. 174 quoad plant. e Prome).

HAB. Prome Hills (Wall. Cat. 5974).

The few specimens seen by me are imperfect, but the terete stems, and more especially the large peculiar peltately adnate stipules, at once remove it from *Desmodium Rottleri*, with which Baker identifies the plant.

4. T. FLEXILIS, Bth. in Linn. Proc. VIII. 265; Hf. Ind. Fl. II. 185.

HAB. Not unfrequent in the moister upper mixed and in the tropical forests of Chittagong, Arracan, and Southern Pegu to Tenasserim.—Fl. Close of RS.; Fr. CS.

5. T. OXYPHYLLA. (*Galactia? oxyphylla*, Bth. in Pl. Jungh. I. 253 in adn.; Hf. Ind. Fl. II. 192).

HAB. Tenasserim, Amherst (Parish); Tavoy (Gomez).

Glycine, L.

Conspectus of Species.

Erect; flowers in small axillary clusters; pods 1—1½ in. long, almost falcate; seeds 3 lin. long, slightly compressed, pale coloured, *G. Soja*.

Twining; flowers in peduncled axillary racemes; pods ½—1 in. long, straight; seeds a line long, compressed, brown, *G. Javanica*.

1. *G. SOJA*, Sieb. and Zucc. Fam. Nat. Fl. Jap. 11; Bth. in Linn. Proc. VIII. 265; Hf. Ind. Fl. II. 184. (*Dolichos Soja*, L. sp. pl. 1621; Roxb. Fl. Ind. III. 314; Jacq. Icon. rar. t. 145; *Soya hispida*, Moench Meth. 153; DC. Prod. III. 396; Alef. in Bot Ztg. 1867. 290).

HAB. Ava, cultivated.

Dunbaria, WA.

Conspectus of Species.

* *Ovary and pods sessile.*

Leaflets large, acuminate, sparingly but distinctly resinous-dotted beneath; flowers in racemes, *D. fusca*.

Leaflets small, bluntish; flowers usually by pairs, *D. conspersa*.

* * *Ovary and pods conspicuously stalked.*

Leaflets acuminate; flowers usually by pairs or few on a very short peduncle; pods pubescent, 1½—2 in. long, 10—12-seeded, long-stalked, *D. podocarpa*.

Leaflets acute; flowers in racemes; pods spreadingly viscid-hairy, 1—1½ in. long, 5—6-seeded, shortly stalked, *D. circinalis*.

1. *D. FUSCA*, Kurz in Journ. As. Soc. Beng. 1874, 186. (*Phaseolus fuscus*, Wall. Pl. As. rar. I. 6. t. 6; Hf. Ind. Fl. II. 204).

HAB. Prome Hills (Wall.).—Fl. Febr., March.

2. *D. CONSPERSA*, Bth. in Pl. Jungh. I. 241; Hf. Ind. Fl. II. 218. (*Dolichos? rhynchosoides*, Miq. Fl. Ind. Bat. I. 177).

HAB. Prome Hills (Wall.).—Fl. Sept. Octob.

3. D. *PODOCARPA*, Kurz in Journ. As. Soc. Beng. 1874, 185; Hf. Ind. Fl. II. 218.

HAB. Upper Tenasserim, Moulmein (Falconer; Helf. 1709).—Fl. Fr. Febr. March.

4. D. *CIRCINALIS*, Bak. in Hf. Ind. Fl. II. 219. (*Atylosia circinalis*, Bth. Pl. Jungh. I. 244 in adn.).

HAB. Tenasserim, Moulmein, etc., (Griff., Helf.) *teste* Baker.

I have seen no Burmese specimens of this species, which greatly resembles the preceding.

Atylosia, WA.

Conspectus of Species.

* *Twining undershrubs or herbs.*

× Prostrate herb with twining branches. Flowers 3—4 lin. long, almost fascicled by 2—3.

Puberulous; pods $\frac{1}{2}$ —1 in. long, tawny puberulous and hirsute,*A. scarabæoides*.

× × Corolla $\frac{1}{2}$ — $\frac{3}{4}$ in. long. Extensive twiners. Flowers racemose.

Leaflets shortly pubescent on both sides; racemes and pods long-pilose, the latter transversely torose, long-acuminate,*A. barbata*.

Leaflets beneath softly (often yellowish) puberulous; pods oblong, transversely impressed between the seeds, yellowish or tawny velvety,*A. mollis*.

* * *Erect shrubs or herbs.*

Stiff annual, little-branched; leaflets beneath closely white or yellowish tomentose; calyx slightly puberulous or almost glabrous; corolla $\frac{1}{2}$ in. long,*A. nivea*.

1. A. *SCARABÆOIDES*, Bth. in Pl. Jungh. I. 242; Hf. Ind. Fl. II. 215. (*Dolichos scarabæoides*, L. sp. pl. 1020; *Dolichos medicagineus*, Roxb. Fl. Ind. III. 315, non Willd.).

HAB. Ava, Bhamo (J. Anderson).—Fr. Jan.

2. A. *BARBATA*, Bak. in Hf. Ind. Fl. II. 216. (*Dunbaria barbata*, Bth. in Pl. Jungh. I. 242 in adn.; *Dunbaria calycina*, Miq. Fl. Ind. Bat. I. 180).

HAB. Frequent in all leaf shedding forests and in the savannahs, also in hedges, etc., all over Pegu and Martaban down to Tenasserim; also Ava and Prome.—Fl. Fr. C. and HS.

3. A. *MOLLIS*, Bth. in Pl. Jungh. I. 243 in adn.; Hf. Ind. Fl. II. 213. (*Dunbaria Horsfieldii*, Miq. Fl. Ind. Bat. II. 179).

HAB. Not unfrequent in the savannah forests, also in the open and the mixed forests, of Martaban and Ava; also Andamans.—Fl. CS.; Fr. HS.

4. A. *NIVEA*, Bth. in Pl. Jungh. I. 243 in adn.; Hf. Ind. Fl. II. 214.

HAB. Not unfrequent in the eng-forests of the Prome district; Ava, Yenang-choung (Wall.).

Cajanus, DC.

* 1. *C. INDICUS*, Spreng. Syst. III. 248; Alef. in Bot. Zeitg. 1867. 289; Hf. Ind. Fl. II. 217. (*Cytisus cajan*, L. sp. pl. 1041; Roxb. Fl. Ind. III. 325; *Cytisus pseudo-cajan*, Jacq. Hort. Vindob. t. 119; *C. flavus*, DC. Prod. II, 402; Jacq. Obs. I. t. 1.).

HAB. Generally cultivated in several varieties all over Burma and the adjacent islands, up to 3000 feet elevation.—Fl. Fr. C. S.

Cylista, Ait.

1. *C. SCARIOSA*, Ait. Hort. Kew. IV. 513; Roxb. Corom. Pl. I. t. 92 and Fl. Ind. III. 320; Wight Icon. t. 1597; Hf. Ind. Fl. II. 219.

HAB. Frequent in the leaf-shedding forests, especially the mixed ones, also in deserted toungyas, savannahs, etc., all over Pegu and Martaban.—Fl. Close of RS; Fr. HS.

Rhynchosia, Lour.

Conspectus of Species.

Subg. 1. *Eu-Rhynchosia*, Seeds without arillus.

* Pods very much longer than the calyx.

× Twining herbs.

Leaflets more or less acute; racemes elongate, longer than the leaves, almost glabrous,

...*R. minima*.

Leaflets obtuse or rounded; racemes filiform, shorter than the leaves, pilose; calyx-teeth filiform,.....*R. pilosa*

× × Erect shrubs or undershrubs.

Greyish velvety; racemes longer than the leaves, paniced at the end of the branches, pod densely velvety,*R. bracteata*.

* * Calyx as long as the corolla, in fruit nearly as long as the pod. Twiners.

Flowers in dense short axillary racemes; pods long-pilose, short,*R. densiflora*.

Subg. 2. *Phyllomatia*, WA. (incl. *Nomismia*, WA. and *Ptychocentrum*, WA.).

Seeds with a waxy arillus.

* Calyx-teeth broad, enlarging and leafy in fruit.

Half-twining, thinly pubescent; flowers singly on the filiform viscid-pubescent racemes, pods 1-seeded,*R. rufescens*.

* * Calyx-teeth lanceolate, acuminate, not enlarging.

Erect; stems, racemes, and undersurface of leaflets white-tomentose; pods 2-seeded,

...*R. candicans*.

1. *R. MINIMA*, DC. Prod. II. 385; Bth. in Fl. Austr. II. 267; Hf. Ind. Fl. II. 223. (*Dolichos minimus*, L. sp. pl. 1020; *Dolichos scarabæoides*, Roxb. Fl. Ind. III. 315, non Willd.).

HAB. In the dry and open forests, also in savannahs, of Prome and Ava.—Fl. Fr. Close of RS.

2. *R. PILOSA*, Wall. Cat. 5499; Hf. Ind. Fl. II. 224.

HAB. Ava, banks of the Irrawaddi near Segain (Wall.).

The foliage resembles that of *Atylosia scarabæoides*, the flowers those of *Atylosia elongata*, Bth.

3. R. BRACTEATA, Bth. in Hf. Ind. Fl. II. 225.

HAB. Not unfrequent in the dry and eng-forests of the Prome district; Ava, Yenang-choung and Taong-dong (Wall.).—Fl. Fr. DS.

4. R. DENSIFLORA, DC. Prod. II. 386; Hf. Ind. Fl. II. 226. (*Dolichos aurantiacus*, Wall. Cat. 5492 E.).

HAB. Ava, limestone hills near Segain; Taong-dong (Wall.).—Fl. Nov.

5. R. RUFESCENS, DC. Prod. II. 387; Hook. Icon. t. 189; Hf. Ind. Fl. II. 220. (*Cyanospermum Javanicum*, Miq. Fl. Ind. Bat. I. 167).

HAB. Ava, Irrawaddi valley near Katha (J. Anderson).—Fl. Jan.

6. R. CANDICANS, (*Cajanus? candicans*, Wall. Cat. 5576; *Atylosia candicans*, Kurz in Journ. As. Soc. Beng. 1874, 186. (*R. Avensis*, Bth. MS.; Hf. Ind. Fl. II. 222; *Dolichos candicans*, Wall. Cat. 5567; Hf. Ind. Fl. II. 226, forma foliolis acutis v. obtusiusculis).

HAB. Ava, banks of the Irrawaddi below Yenang-choung; also Taong-dong (Wall.).—Fl. Nov.

Flemingia, Roxb.

Conspectus of Species.

Subg. 1. Eu-Flemingia. Erect shrubs or herbs. Flowers in racemes, panicles or head-like spikes.

§ 1. *Ostryodium*, DC. Racemes one-sidedly flowered, the upper ones collected into a terminal panicle. Floral bracts large, leafy, complicate, persistent. Leaves 1-foliolate. Pods 2-seeded.

× Floral bracts quite glabrous.

Corolla yellowish, $\frac{1}{3}$ in. long; leaves cordate-ovate, *F. chappar.*

× × Floral bracts puberulous or pubescent.

Stipules not above 3 lin. long, rather deciduous; bracts rotundate and obsoletely pointed, not ciliate; corolla about 3 lin. long, white or yellowish, .. *F. strobilifera*.

Stipules stiff-subulate, up to $\frac{1}{2}$ in. long; bracts more or less retuse, ciliate; corolla purplish, about 2 lin. long, *F. bracteata*.

§ 2. *Flemingiastrum*. DC. (incl. *Chalaria*, WA.). Racemes spikelike, solitary or clustered in the leaf-axils, or in panicles, rarely reduced to axillary or terminal more or less involucred heads.

× Flowers in racemes or panicles. Pods usually few-seeded.

+ Leaves 1—3-foliolate. Bracts small, persistent or deciduous (*Chalaria*, WA.).

Leaves 1-foliolate; racemes filiform, shorter than the leaves, *F. paniculata*.

Leaves 3-foliolate; racemes slender, as long or usually longer than the leaves,

.. *F. lineata*.

+ + Leaves digitately 3-foliolate. Spikes, while young, densely imbricate-bracted, the bracts deciduous long before opening of the flowers, or rarely persistent.

O Bracts not scarious, shorter than, or about as long as the buds. Low shrubs, the branches more or less terete or angular.

† Bracts persistent during flowering time.

Racemes dense, sessile; corolla 3 lin. long; calyx-lobes subulate, the lower one $2\frac{1}{2}$ lin. long; petioles less than an inch long, *F. Grahamiana*.

Racemes dense, villous, the broad bracts much shorter than the pilose calyx; calyx-teeth $3-3\frac{1}{2}$ lin. long, linear, subulate-acuminate; corolla slightly longer than the calyx; petiole 1—2 in. long, not winged, *F. Wallichii*.

† † Bracts deciduous before opening of the flowers.

¶ Low shrubs with a woody subterranean trunk.

Racemes small, silvery silk-hairy; calyx-teeth falcately subulate, a line long, the lowermost one $1\frac{1}{2}$ lin. long; corolla 2 lin. long; petiole winged, about an inch long, *F. sericans*.

As preceding, but flowers somewhat larger and not silvery silk-hairy; petiole 3—6 in. long and longer, winged, *F. nana*.

Racemes rather slender and lax; flowers almost sessile; corolla 2 lin. long or a little longer; calyx-teeth falcate-lanceolate, the lowermost one barely longer than the rest; petiole winged, 1—2 in. long, *F. ferruginea*.

¶ ¶ Well-developed undershrubs.

Petiole usually not winged; racemes dense, usually clustered and shorter than the petiole, greyish silk-hairy; bracts linear-lanceolate, subulate-acuminate, about 4 lin. long; calyx $3\frac{1}{2}$ lin. long, the lobes linear, subulate-acuminate, the lowermost much longer; corolla $3\frac{1}{2}$ lin. long, purplish, with a flesh-coloured purplish-streaked standard, *F. congesta*.

As preceding; racemes appressed tawny-pubescent, much shorter than the narrowly winged petiole; pods densely resinose-glandular and puberulous, *F. prostrata*.

Petiole narrowly winged; racemes rather lax, greyish silk-hairy; calyx 3 lin. long, the lobes subulate; bracts ovate-lanceolate, cuspidate; corolla 3 lin. long, rose-coloured with greenish keel; pods puberulous, *E. semialata*.

Petiole narrowly winged; bracts and calyx appressedly brown or golden silk-hairy, the latter $\frac{1}{2}$ in. long, the lobes subulate with the lowermost one twice as long; corolla $\frac{1}{2}$ in. long, white with rose-coloured wings, *F. latifolia*.

O O Bracts scarious and stiff, very much longer than the flower buds. Branches and branchlets more or less triquetrous.

Tall undershrub; petiole narrowly winged; lower sheathing bracts up to 2 in. long; calyx about 4 lin. long, silvery silk-hairy, the lobes linear, acuminate, the lowermost one twice as long; corolla nearly $\frac{1}{3}$ in. long; pods minutely appressed puberulous, *F. stricta*.

× × Spikes short and condensed into heads. Bracts all persistent, the outer ones large and involucre-like. Pod enclosed in the calyx, 1-seeded. (*Lepidocoma*, Jungh.)

Erect undershrub; bracts silky-pilose; calyx $\frac{1}{2}$ in. long, the lobes subulate; corolla $\frac{1}{2}$ in. long, minutely appressed silk-hairy; pods silky-pilose, *F. capitata*.

Subg. 2 Rhynchosioides, Bak. Twining herbs or perennials. Flowers in long peduncled heads or dichotomous corymbs. Calyx-teeth almost equal. Pods 1- rarely 2-seeded, usually included in the calyx. Bracts minute, deciduous.

Flowers by 4—10 in long-peduncled heads; calyx fulvous-pilose, $\frac{1}{3}$ in. long; corolla appressed pilose, nearly $\frac{1}{2}$ in. long, *F. vestita*.

1. *F. CHAPPAR*, Ham. in Wall. Cat. 5757 ; Hf. Ind. Fl. II. 227.

HAB. Frequent in the eng- and dry forests of Ava, Prome, Pegu, and Martaban.—Fl. CS. ; Fr. HS.

2. *F. STROBILIFERA*, RBr. in Ait. Hort. Kew. ed. 2. IV. 350 ; Wight Icon. t. 267 ; Bot. Reg. t. 617 ; Hf. Ind. Fl. II. 227. (*Hedysarum strobiliferum*, L. sp. pl. 1053 ; Roxb. Fl. Ind. III. 350).

HAB. Common in all leaf-shedding forests and in the savannahs, all over Burma, from Chittagong and Ava down to Tenasserim and the Andamans.—Fl. R. and CS. ; Fr. HS.

3. *F. BRACTEATA*, Wight Icon. t. 268 ; Miq. Fl. Ind. Bat. I. 162. (*F. strobilifera* var. 1. *bracteata*, Bak. in Hf. Ind. Fl. II. 227 ; *Hedysarum bracteatum*, Roxb. Fl. Ind. III. 351).

HAB. Frequent in all leaf-shedding forests, especially the lower mixed and savannah forests, all over Burma, from Ava and Martaban down to Pegu.—Fl. Close of RS. and CS. ; Fr. HS.

4. *F. PANTULATA*, Wall. Cat. 5759 ; Bth. in Pl. Jungh. I. 245 in adn. ; Hf. Ind. Fl. II. 227.

HAB. Upper Tenasserim, Attaran river (Wall., Helf.).—Fl. CS.

5. *F. LINEATA*, Roxb. Fl. Ind. III. 341 ; Wight Icon. t. 327 ; Hf. Ind. Fl. II. 228. (*Hedysarum lineatum*, L. sp. pl. 1054 ; Burm. Fl. Ind. 167. t. 53. f. 1).

HAB. Common in the savannahs and the lower mixed forests, also in grass-lands, etc., all over Ava, Prome, and Pegu ; also Martaban.—Fl. CS. ; Fr. HS.

6. *F. SERICANS*, Kurz in Journ. As. Soc. Beng. 1874, 186.

HAB. Frequent in the eng-forests of Prome district and of Martaban, east of Tounghoo.—Fl. Fr. HS.

7. *F. FERRUGINEA*, Grah. in Wall. Cat. 5750 ; Bth. in Pl. Jungh. I. 245 in adn.

HAB. Prome, frequent in the eng-forests ; Ava, Taong-dong (Wall.).—Fl. Fr. March.

Habit of *F. Wightiana*, but the flowers very small and the calyx perfectly different.

8. *F. CONGESTA*, Roxb. Hort. Bengh. 56 and Fl. Ind. III. 340 ; Wight Icon. t. 390 ; Miq. Fl. Ind. Bat. I. 164 ; Hf. Ind. Fl. II. 228.

HAB. Frequent in alluvial grass-lands, especially in the savannah-forests, all over Pegu and Martaban down to Tenasserim ; also Ava.—Fl. Close of RS. ; and CS. ; Fr. C. and HS.

9. *F. PROSTRATA*, Roxb. Fl. Ind. III. 338 ; Bth. in Pl. Jungh. I. 245 in adn.

HAB. Not unfrequent in the drier hill- (especially the pine-) forests of the Martaban Hills, east of Tounghoo, at 4000 to 5000 feet elevation.—Fr. March.

The Burmese variety differs from Khasi specimens chiefly in the long-acuminate not wrinkled leaflets and the black-glandular pods.

10. *F. SEMIALATA*, Roxb. Fl. Ind. III. 340; Wight Icon. t. 726; WA. Prod. I. 241. (*F. congesta*, var. 1. *semialata*, Bak. in Hf. Ind. Fl. II. 229 in part).

Var. *a. GENUINA*, racemes elongate, more robust.

Var. *β. VIRIDIS*, racemes simple, more lax and slender, more silk-hairy, always clustered in the axils of the leaves, and much shorter than the petiole; leaves of a thinner texture or less pubescent; flowers and pods usually smaller.

HAB. Var. *β.* only, but this common enough, in the leaf-shedding forests and in grassy or shrubby places, more especially in the savannahs, all over Burma, from Chittagong and Ava down to Tenasserim.—Fl. CS.; Fr. HS.

11. *F. LATIFOLIA*, Bth. in Pl. Jungh. I. 246; Miq. Fl. Ind. Bat. I. 163. (*F. congesta*, var. 2. *latifolia*, Bak. in Hf. Ind. Fl. II. 229).

Var. *a. GENUINA*, racemes more lax and more slender, branched; flowers smaller.

Var. *β. GRANDIFLORA*, racemes simple, shorter and more dense; flowers about $\frac{1}{3}$ larger.

HAB. Var. *β.* rather frequent in the hill-eng-forests and the drier hill- (chiefly the pine-) forests of the Martaban Hills, east of Tounghoo, at 2000—4000 feet elevation.—Fl. March.

12. *F. STRICTA*, Roxb. Corom. Pl. III. t. 248 and Fl. Ind. III. 342; Wight Icon. t. 329; Hf. Ind. Fl. II. 228.

HAB. Not unfrequent in the open forests, especially the low and eng-forests, of Pegu; also Chittagong, Ava, and Tenasserim.—Fl. CS.

13. *F. CAPITATA*, Zoll. in Natuurk. en Geneesk. Arch. III. 64; Miq. Fl. Ind. Bat. I/2. 166. (*F. involucrata*, Bth. in Pl. Jungh. I. 246; Hf. Ind. Fl. II. 229; *Lepidocoma trifoliatum*, Jungh. in Topogr. Naturw. Reise, Java, 338 and in Flora 1847. 508.)

HAB. Frequent in the open, especially the low forests, all over Pegu; also in Martaban, where it ascends into the drier hill-forests; Upper Tenasserim.—Fl. Fr. CS.

F. procumbens of the Kew Herbarium, from Concan (Stocks; Wight No. 806), has nothing to do with Roxburgh's plant and appears to me to be a new species of *Lepidocoma*, probably connecting that genus with *Rhynchosioides*.

*14. *F. VESTITA*, Bth. in Hf. Ind. Fl. II. 230. (*Dolichos vestitus*, Grah. in Wall. Cat. 5545; *Rhynchosia vestita*, Bth. MS.).

HAB. Sometimes cultivated by the Karens of the Martaban Hills, at 3000 to 5000 feet elevation.

Eriosema, DC.

1. *E. TUBEROSUM*, (*Crotalaria tuberosa*, Ham. in Don Prod. Nap. 241; DC. Prod. II. 129; *E. Chinense*, Vog. in Pl. Meyen. 31; Bth. Fl. Austr. II. 268; Hf. Ind. Fl. II. 219).

HAB. Frequent in the open, especially the eng-forests, all over Prome and Pegu; also Martaban, here ascending into the drier hill-forests up to 4000 feet elevation.—Fl. Close of RS.; Fr. CS.

Crotalaria, L.*Conspectus of Species.*

A. SIMPLICIFOLLE. Leaves simple.

* Ovary and pods glabrous.

+ Racemes lateral and leaf-opposed.

× Stipules none or small, not decurrent.

O Almost glabrous. Slender erect annuals.

Stipules half-lunate, persistent, *C. filiformis*.

Stipules very minute, deciduous, *C. Stocksii*.

O O Silk-hairy or pilose.

† Prostrate or ascending small herbs; flowers not above
2½ lin. long.

Bracts subulate, very minute; stipules none; pods 15—30-seeded, *C. prostrata*.

Bracts subulate, minute; stipules minute, subulate; pods 6—8-seeded, .. *C. humifusa*.

Bracts lanceolate, a line long; stipules subulate, minute; pods 12—15-seeded,
..... *C. acicularis*.

+ † Flowers ½—¾ in. long. Erect branched annuals.

Tawny pilose; stipules lanceolate, spreading; pod 20—30-seeded, *C. ferruginea*.

× × Stipules decurrent and forming leafy wings to the branches.

Erect annual; flowers middling-sized, yellow; pods stalked, *C. alata*.

+ + Racemes terminal or terminating axillary branchings. More or
less hairy, hirsute or appressed silk-hairy, rarely glabrous.

O Calyx divided to the base into lobes, of which especially the
2 upper ones much enlarge in fruit.

† Pod exserted from the calyx.

Flowers ¼ in. long, pale yellow, racemose; bracts linear, very minute; pods 1½—2 times
longer than the calyx, ½—¾ in. long, *C. albida*.

† † Pod more or less included and shorter than the calyx.
(*Calycinae*.)

¶ Pod small, globular or ovoid-globose, sessile.

Small herb; racemes shortened and head-like *C. nana*.

Erect annual of several feet; racemes elongate, *C. linifolia*.

¶ ¶ Pods linear-oblong to oblong.

Δ Flowers yellow or pale yellow.

Flowers few, in short lax racemes; fruiting calyx covered with long coppery brown
soft hairs; pods an inch long; bracts and bractlets large, lanceolate, .. *C. calycina*.

Flowers in dense heads; calyx and pod ¼ in. long; bracts and bractlets large, ovate,
acuminate, *C. dubia*.

Flowers? yellow, capitate; calyx and pods ¼—½ in. long; bracts and bractlets linca,
C. Chinensis.

△ △ Flowers blue.

Flowers in long racemes; bracts and bractlets long, setaceous; calyx $\frac{1}{4}$ — $\frac{1}{2}$ in. long; pods $\frac{1}{2}$ in. long, *C. sessiliflora*.

O O Pods very much exserted from the calyx. Calyx-tube obliquely bell-shaped, the teeth rather short, barely enlarging in fruit.

¶ Bracts subulate, very minute. Flowers yellow.

△ Branches and branchlets woody, with medullary pith, terete.

Almost glabrous; leaves acute; racemes terminating axillary branchlets or reduced to axillary flower-clusters, *C. Kurzii*.

△ △ Branches herbaceous, fistulose, stout.

Calyx and underside of the blunt or acute leaves densely appressed silky; racemes all terminal, *C. Assamica*.

Thinly appressed silk-hairy; leaves retuse to blunt; racemes all terminal, *C. retusa*.

¶ ¶ Bracts ovate to ovate-lanceolate, up to 4 lin. long, reflexed.

Glabrous; leaves blunt to acute, almost sessile, glaucous-green; pods stalked; branches stout, fistulose, *C. sericea*.

* * Ovary variously clothed, from villose to tomentose and appressed silk-hairy. Pods similarly clothed, rarely minutely pubescent and appearing glabrous to the naked eye. (Flowers racemose.)

+ Stipules none, or small and subulate. Flowers yellow.

× Pods minutely appressed-pubescent, appearing glabrous to the naked eye. Calyx glabrous. Leaves narrow.

Glabrous; bracts linear, very minute; leaves narrow-linear, *C. neriifolia*.

× × Pods and calyx brown or dark brown tomentose or pubescent, leaves narrow.

Stems sulcate, but not angular; pods sessile, $1-1\frac{1}{4}$ in. long, *C. juncea*.

Stems sharply 4-angular; pods shortly stalked, $1\frac{1}{2}-2$ in. long, *C. tetragona*.

+ + Stipules large, leafy, half-lunate. Flowers blue or rarely greenish white.

Stems angular, more or less puberulous to glabrous; leaves rhomboid; pods pubescent, .. *C. verrucosa*.

B. FOLIOLATE. Leaves 3—7-foliolate.

* Leaves digitately 5 (occasionally 3)—7-foliolate.

Leaves 5-foliolate; flowers rather large, yellow, racemose; bracts 3—4 lin. long, linear, acuminate, reflexed; pods glabrous, stalked, $1\frac{1}{4}-1\frac{1}{2}$ in. long, *C. quinquefolia*.

* * Leaves digitately 3-foliolate.

× Pods inflated.

+ Pods short, globular or obliquely ovoid, 1-2-4-seeded.

Stipules and bracts minute, subulate; flowers small, by 1—2 (rarely 3—4) terminating slender leaf-opposed peduncles; pods acuminate, minutely appressed pubescent, 1—2-seeded, *C. medicaginea*.

+ + Pods oblong to linear-oblong, many-seeded.

Pods indistinctly appressed-pubescent, linear-oblong, $1-1\frac{1}{4}$ in. long, *C. striata*.

Pods densely tawny-villous, boat-shaped-oblong, somewhat curved, $\frac{2}{3}-\frac{3}{4}$ in. long, .. *C. bracteata*.

× × Pods much compressed (*Priotropis*, WA.).

Habit of *C. striata*; flowers yellow, racemose; pods 1 in. long by $\frac{1}{2}$ broad, acuminate at both ends, on a filiform stalk, glabrous, *C. cytisoides*.

1. *C. FILIFORMIS*, Wall. Cat. 5389; Hf. Ind. Fl. II. 66.

HAB. Frequent in the mixed forests, especially the upper ones, of the Pegu Yomah, and along choungs in the lower mixed forests of the plains; also Prome district.—Fl. Fr. Nov. to Jan.

2. *C. STOCKSII*, Bth. MS.; Hf. Ind. Fl. II. 67.

HAB. Tenasserim (or Andamans?) (Helf.).

Unknown to me and included on Baker's authority.

3. *C. PROSTRATA*, Roxb. Fl. Ind. III. 270; Mart. Muench. Denkschr.

6. t. E; Hf. Ind. Fl. II. 67.

HAB. Martaban, Nattoung hills, east of Tounghoo (Revd. F. Mason).

4. *C. ACICULARIS*, Ham. ap. Bth. in Hook. Lond. Journ. Bot. II. 476; Hf. Ind. Fl. II. 68.

HAB. Common, chiefly in the dry and open forests, preferring stiff diluvial soils, all over Chittagong and Prome to Pegu and Martaban.—Fl. Fr. C. and HS.

5. *C. FERRUGINEA*, Grah. in Wall. Cat. 5398; Hf. Ind. Fl. II. 68.

Var. α . *GENUINA* (*C. ferruginea*, var. β . *pilosissima*, Bth. in Hf. Ind. Fl. II. 68), more or less spreading; leaves narrower and more or less acute; all parts more densely rusty pilose.

Var. β . *PILOSISSIMA* (*C. pilosissima*, Miq. Fl. Ind. Bat. I 327), erect and often less pilose; leaves broader and rounded or blunt at the apex.

HAB. Var. α . frequent in the drier hill- and the pine-forests of Martaban and Ava, at 4000 to 5000 ft. elevation; var. β . frequent along rocky river-beds in the tropical forests, from Ava and Martaban down to Tenasserim.—Fl. Fr. HS.

6. *C. ALATA*, Roxb. Hort. Bengh. 98. and Fl. Ind. III. 274; Hf. Ind. Fl. II. 69. (*C. bialata*, Roxb. Fl. Ind. III. 274).

HAB. Common in the long-grassed jungle-pastures of the open and dry forests, but also in the mixed forests, etc., all over Burmah, from Chittagong and Ava down to Pegu and Martaban.—Fl. Fr. Close of RS., and CS.

7. *C. ALBIDA*, Heyne in Roth. Nov. sp. 333; Hf. Ind. Fl. II. 71. (*C. montana*, Roxb. Fl. Ind. III. 265).

HAB. Frequent in the open and dry forests, all over Burma, from Chittagong and Ava down to Tenasserim.—Fl. Fr. CS.

8. *C. LINIFOLIA*, L. f. Suppl. 322; Roxb. Fl. Ind. III. 266; Hf. Ind. Fl. II. 72. (*C. caespitosa*, Roxb. Fl. Ind. III. 269; *C. melanocarpa*, Bth. in Hook. Lond. Journ. II. 569).

HAB. Not unfrequent in the mixed forests, especially the upper ones, from Ava and Prome down to Pegu and Martaban; also found in

grass-lands and along grassy borders of the fields in the Pegu plains.—Fl. Fr. CS.

N. B. *C. patula*, Grah. (in Wall. Cat. 5371; Bth. in Hook. Lond. Journ. II. 568, from Ava), is reduced by Baker to a variety of *C. nana*, Burm. I am unacquainted with the species.

9. *C. CALYCINA*, Schrank. Pl. rar. Monac. t. 12; Hf. Ind. Fl. II. 72. (*C. stricta*, Roxb. Fl. Ind. III. 265, non Roth.).

HAB. Ava, Irrawaddi-valley near Tagoung (J. Anderson); Taongdong (Wall.).—Fl. Fr. Jan.

10. *C. DUBIA*, Grah. in Wall. Cat. 5404; Hf. Ind. Fl. II. 73.

HAB. Frequent in the upper mixed forests, but chiefly in poonzohs, of Chittagong, Pegu, and Martaban, up to 3000 feet elevation.—Fl. Fr. CS.

11. *C. CHINENSIS*, L. sp. pl. 1003, non Roxb.; Hf. Ind. Fl. II. 73. (*C. barbata*, Miq. Fl. Ind. Bat. I. 338, non Grah.).

HAB. Pegu and Tenasserim (*teste* Baker).

12. *C. SESSILIFLORA*, L. sp. pl. 1004; Hf. Ind. Fl. II. 73.

HAB. Common in jungle-pastures and in open places of the open and dry forests, all over Burma, from Chittagong and Ava down to Tenasserim. Fl. Fr. Close of R. and CS.

13. *C. KURZII*, Bak. in Journ. As. Soc. Beng. 1873. 229; Hf. Ind. Fl. II. 75.

Var. *α*. *GENUINA*, Leaves longer and of a thinner texture; flowers usually axillary and gradually passing into terminal or axillary racemes with all intermediate conditions on the same plant; pods an inch long. Low-level form.

Var. *β*. *MONTANA*, leaves of a firmer texture and half the size; flowers in true leafless elongate axillary and terminal racemes; pods only $\frac{1}{2}$ an inch long. High-level form.

HAB. Var. *α*. common in the upper, rare in the lower mixed forests, all over the Pegu Yomah and Martaban; var. *β*. pretty frequent in the drier hill- (especially the pine-) forests of Martaban, up to 5000 feet elevation.—Fl. CS.; Fr. HS.

C. Peguana, Bth. MS. (Hf. Ind. Fl. II. 77, from Rangoon), is unknown to me. It seems to me to differ in no respect from the axillary-flowered form of the above.

14. *C. ASSAMICA*, Bth. in Hook. Lond. Journ. Bot. II. 481; Hf. Ind. Fl. II. 75.

HAB. Ava, in the Khakyen hills, east of Bhamo (J. Anderson).—Fl. Fr. March.

In Ava specimens the flowers sometimes grow indifferently in the place of the leaves from the leaf-branches, so that the flowers are either mixed up with the leaves (reduced flowering branchlets) or form incomplete ra-

comes below the leafy summit. The species itself, however, may be nothing but a more pubescent hill-form of *C. retusa*.

14. *C. MACROPHYLLA*, Kurz MS. (*C. Kurzii*, var. *luxurians*, Kurz in Journ. As. Soc. Beng. 1873, 229).

HAB. Rare in the moister upper mixed forests of the Southern Pegu Yomah.—Fr. CS.

I have referred this form erroneously to *C. Kurzii*, but the stout hollow stems bring it nearer to *C. Assamica*, from which it differs not only in its much larger petioled leaves and in the calyx, but also in the pods, which are sessile and $1\frac{1}{2}$ —2 in. long. Habitually it may be called a very luxuriant terminal-racemed form of *C. Kurzii*.

15. *C. RETUSA*, L. sp. pl. 1004; Roxb. Fl. Ind. III. 272; Bot. Mag. t. 2561; Bot. Reg. t. 253; Hf. Ind. Fl. II. 75.

HAB. Chiefly in grassy sandy places near the sea in Arracan and Pegu, but also found along the banks of the Irrawaddi in the Prome district; it has become a weed on Ross Island etc., on the Andamans, but there very likely only introduced.—Fl. Fr. Close of RS. and DS.

16. *C. SERICEA*, Retz. Obs. III. 26; Roxb. Fl. Ind. III. 273; Hf. Ind. Fl. II. 75.

HAB. Frequent along rocky choungs in the hills of Chittagong, Arracan, and the Pegu Yomah; rarely seen along the banks of the larger rivers in the plains of Pegu.—Fl. Fr. CS.

17. *C. NERIIFOLIA*, Wall. Cat. 5362; Hf. Ind. Fl. II. 74.

HAB. Not unfrequent in the hill-eng-forests of Martaban, east of Tounghoo; Ava, Taong-dong (Wall.).—Fl. Nov.; Fr. March, Apr.

18. *C. JUNCEA*, L. sp. pl. 1004; Bot. Mag. t. 490; Roxb. Corom. Pl. II. t. 193 and Fl. Ind. III. 259; Hf. Ind. Fl. II. 79. (*C. fenestrata*, Sims. Bot. Mag. t. 1933; *C. tenuifolia*, Roxb. Fl. Ind. III. 263).

HAB. Frequently cultivated in fields all over Burma, especially in Prome and Pegu, but also like wild along the banks of the larger rivers, especially the Irrawaddi.—Fl. Fr. H. and RS.

19. *C. TETRAGONA*, Roxb. Fl. Ind. III. 263; Andr. Bot. Repos. t. 593; Hf. Ind. Fl. II. 78. (*C. grandiflora*, Zoll. in Miq. Fl. Ind. Bat. I. 333, teste Baker).

HAB. Frequent, especially along rocky choungs in hilly tracts, all over Ava and Chittagong to Pegu and Arracan; ascending to 3000 feet elevation; less frequent along rivers in the alluvium of the plains.—Fl. Fr. CS.

20. *C. VERRUCOSA*, L. sp. pl. 1005; Roxb. Fl. Ind. III. 273; Bot. Mag. t. 3034; Bot. Reg. t. 1134; Wight Icon. t. 200; Hf. Ind. Fl. II. 77. (*C. angulosa*, Lamk. Enc. II. 196?; Roxb. Fl. Ind. III. 274; *C. coerulea*, Jacq. Icon. t. 144).

HAB. Frequent in open grassy places, along river-banks and roadsides, especially in Ava and Prome, less frequent in Pegu and Martaban.—Fl. Fr. C. and H. S.

21. *C. QUINQUEFOLIA*, L. sp. pl. 1006 ; Roxb. Fl. Ind. III. 279 ; Hf. Ind. Fl. II. 84 (*C. sp.* Griff. Not. Dicot. 437).

HAB. Not unfrequent in wet pastures, marshy grass-lands and along borders of rice-fields, from Arracan and Pegu down to Tenasserim.—Fl. Fr. RS.

22. *C. MEDICAGINEA*, Lamk. Dict. II. 201 ; Hf. Ind. Fl. II. 81 (*C. procumbens*, Roxb. Fl. Ind. 278).

HAB. Not unfrequent in the dry forests of Ava and Prome ; rare in the mixed forests of Pegu.—Fl. Close of RS ; Fr. CS.

23. *C. BRACTEATA*, Roxb. Fl. Ind. III. 278 ; Wight Icon. t. 273 ; Griff. Not. Dicot. 436 ; Hf. Ind. Fl. II. 83.

HAB. Not unfrequent in the mixed forests, especially the upper ones, and in dry pastures and rubbishy places adjoining them, all over Burma, from Chittagong and Ava down to Tenasserim.—Fl. Fr. Close of RS. and CS.

24. *C. STRIATA*, DC. Prod. II. 131 ; Bot. Mag. t. 3200 ; Hf. Ind. Fl. II. 85. (*C. Brownei* Rehb. Icon. Exot. t. 232 ; *C. Saltiana*, Andr. Bot. Repos. t. 648).

HAB. Frequent in grass and cleared lands, rubbishy places, along roadsides, etc., all over Pegu and Chittagong to Arracan ; most probably throughout the country.—Fl. Fr. R. and CS.

25. *C. CYTISOIDES*, Roxb. Fl. Ind. III. 276 (*Priotropis cytisoides*, WA. Prod. I. 180 in adn. ; Hf. Ind. Fl. II. 65).

HAB. Ava, Taong-dong, Khakhyen hills, east of Bhamo ; also Tenasserim (Griff.)—Fl. F. R. and CS.

Parochetus, Ham.

1. *P. COMMUNIS*, Ham. in Don. Prod. Fl. Nep. 240 ; Royle Ill. Him. Pl. t. 35 ; Hf. Ind. Fl. II. 86. (*P. major*, Don. Fl. Nep. 241 ; Wight Icon. t. 483 ; *P. maculatus*, R. Br. in Benn. Pl. Jav. rar. 162. t. 34 ; *Cosmisa repens*, Alef. in Bot. Ztg. 1866. 145. t. 6. B. f. 1—6).

HAB. Ava and Tenasserim (*teste* Baker).

Melilotus, Juss.

1. *M. ALBA*, Desr. in Lamk. Dict. IV. 64 ; Koch Syn. Fl. Germ. ed. 3. I. 144 ; Hf. Ind. Fl. II. 89. (*M. leucantha*, Koch in DC. Fl. Franc. V. 564 ; Engl. Bot. Suppl. t. 2689 ; *Trifolium Indicum*, Willd. sp. pl. III. 1353 ; Roxb.—Fl. Ind. III. 388).

HAB. Prome district, a weed in the fields of the Irrawadi valley.—Fl. Fr. CS.

Psoralea, L.

1. *P. CORYLIFOLIA*, L. sp. pl. 1075 ; Roxb. Fl. Ind. III. 387 ; Bot. Mag. t. 665 ; Hf. Ind. Fl. II. 103. (*Melilotus* sp. Griff. Not. Dicot. 437. t. 578).

HAB. Occasionally in neglected fields, near hedges and along roadsides in the Prome district ; apparently more frequent in Ava.—Fl. Fr. CS.

Cyamopsis, DC.

*1. *C. PSORALIODES*, DC. Prod. II. 216 ; Wight Icon. t. 248 ; Hf. Ind. Fl. II. 92. (*Dolichos fabæformis*, L' Her. Stirp. t. 78 ; Roxb. Fl. Ind. III. 316 ; *Lupinus trifolius*, Cav. Icon. t. 59).

HAB. Burma, cultivated (according to Revd. F. Mason).—Fl. Fr. CS.

Indigofera, L.*Conspectus of Species.*

Subg. 1. Sphaeridiophora, Desv. Ovary 1-ovuled. Pods very short, 1-seeded.

All parts, also the pods, appressed silk-hairy ; leaves simple, small ; pods almost globular, *I. linifolia*.

Subg. 2. Eu-Indigofera, Bth. Ovary 2—more-ovuled ; pods usually elongate, rarely short.

* *Calyx deeply cleft, the lobes subulate-acuminate. Corolla about twice so long as the calyx. Annuals or perennials.*

+ Pods short, 2- rarely 3-seeded.

Appressed pubescent ; leaves pinnate ; pods almost 4-angular, shortly hairy ; seeds cubical, *I. enneaphylla*.

+ + Pods many- or several-seeded, elongate.

O Seeds cylindrical.

Leaflets usually in 4 to 5 pairs ; racemes shorter than the leaves, *I. tinctoria*.

Leaflets in 1 or 2 pairs ; racemes very slender, much longer than the leaves, *I. endecaphylla*.

Leaves 3-foliolate ; racemes very short or reduced to clusters, *I. trifoliata*.

O O Seeds cubical or 4-angular-oblong.

All parts (also the pods) viscose-pubescent ; leaflets in 4—7 pairs, *I. viscosa*.

All parts appressed greyish or silvery pubescent ; leaves 3-foliolate ; pods thinly appressed pubescent, *I. trita*.

All parts hirsute-pubescent ; leaflets usually in 3 or 4 pairs ; pods hirsute, *I. hirsuta*.

* * *Calyx toothed, the teeth short, more or less acute. Corolla at least 3 times as long as the calyx and usually much longer. More or less woody shrubs.*

× Leaves simple or 3-foliolate (often on the same plant).

Whole plant greyish from minute appressed stiff hairs ; leaves 1—3-foliolate on the same plant ; stipules very minute, *I. Brunoniana*.

Softly tawny pubescent ; leaves 1-foliolate ; stipules about 2 lin. long, *I. caloneura*.

× × Leaves unpaired pinnate.

O Pods $1\frac{1}{2}$ —2 in. long, more or less 4-gonous ; seeds cubical or 4-cornered.

Stipules 2—3 lin. long ; pods minutely appressed pubescent, *I. galegoides*.
 Stipules minute ; pods glabrous, *I. pulchella*.

O O Pods about an inch long, terete. Seeds cylindrical.

Pods glabrous ; stipules minute, *I. elliptica*.

1. *I. LINIFOLIA*, Retz. Obs. IV. 29. and VI. 33. t. 2 ; Roxb. Corom. Pl. II. t. 196 and Fl. Ind. III. 370 ; Wight Icon. t. 313 ; Hf. Ind. Fl. II. 92.

HAB. Not unfrequent in short-grassed rather dry pastures of Chittagong, Pegu, and Arracan ; probably all over the country.—Fl. Fr. chiefly C. and HS.

2. *I. ENNEAPHYLLA*, L. Mant. 272 ; Roxb. Fl. Ind. III. 376 ; Wight Icon. t. 403 ; Hf. Ind. Fl. II. 94.

HAB. Ava, on limestone hills about Segain ; in the dry forests of the Prome district.—Fl. Fr. Nov.

3. *I. TINCTORIA*, L. sp. pl. 1061 ; Roxb. Fl. Ind. III. 379 ; Wight Icon. t. 365 ; Royle Ill. Him. Pl. t. 195 ; Hf. Ind. Fl. II. 99.

Var. *a. GENUINA*, pods about an inch long and more slender, usually straight or only slightly curved, 7—10-seeded, the seeds about a line long, pale coloured.

Var. *β. ANIL* (*J. Anil*, L. Mant. 272 ; Miq. Fl. Ind. Bat. I. 307 ; *J. coerulea*, Roxb. Fl. Ind. III. 377 ; Wight Icon. t. 366 ; *I. argentea*, var. *coerulea*, Bak. in Hf. Ind. Fl. II. 99), pods more curved and reflexed, shorter, about $\frac{1}{2}$ in. long but sometimes longer, 3—4, but as often 4—6 and even up to 7-seeded, the seeds smaller, olive-coloured.

HAB. Var. *a.* frequently cultivated in the Irrawaddi alluvium of Prome and Pegu, and most probably elsewhere ; var. *β.* frequent in the open forests, especially the low ones, in jungle-pastures and along river-banks, all over Burma, from Ava and Martaban down to Tenasserim.—Fl. Fr. Close of RS., and CS.

I cannot find any sufficient grounds for specifically separating the above two forms ; the pod differs greatly on the same plant.

4. *I. ENDECAPHYLLA*, Jacq. Icon. t. 570 ; Bot. Reg. t. 789 ; Hf. Ind. Fl. II. 98. (*I. debilis*, Grah. in Wall. Cat. 5466 ; Kurz in Journ. As. Soc. Beng. 1874, 184).

HAB. Ava, Irrawaddi valley (Wall. ; Mrs. Burney).—Fl. Sept.

The pods of the Burmese plant are more slender and more persistently pubescent.

5. *I. TRIFOLIATA*, L. Amoen. IV. 327 ; Wight Icon. t. 314 ; Hf. Ind. Fl. II. 96.

HAB. Tenasserim (Helf.) *teste* Baker.

6. *I. VISCOSA*, Lamk. Encycl. Meth. III. 247 ; Roxb. Fl. Ind. III. 377 ; Wight Icon. t. 404 ; Hf. Ind. Fl. II. 95.

HAB. Ava, near Mandalay (J. Anderson).—Fl. Fr. Sept.

7. I. TRITA, L. f. Suppl. 335 ; Roxb. Fl. Ind. III. 371 ; Wight. Icon. t. 315 and t. 386 ; Hook. Comp. Bot. Mag. I t. 16 ; Hf. Ind. Fl. II. 96. (*I. cinerea*, Willd. sp. pl. III. 1225 ; Roxb. l. c. 372).

HAB. Ava, Taong dong (Wall.).—Fr. Octob.

8. I. HIRSUTA, L. sp. pl. 1862 ; Roxb. Fl. Ind. III. 376 ; Jacq. Icon. t. 569 ; P. d. B. Fl. d' Ovar. t. 119 ; Hook. Comp. Bot. Mag. t. 24 ; Hf. Ind. Fl. II. 98.

HAB. Ava (Wall.) ; Tenasserim (*teste* Baker).—Fl. Octob.

9. I. BRUNONIANA, Grah. in Wall. Cat. 5491 ; Wall. Pl. As. rar. III. 48. t. 279 ; Hf. Ind. Fl. II. 93.

HAB. Not unfrequent in the eng-forests of the Prome district and of Pegu.—Fl. Close of RS. ; Fr. CS.

10. I. CALONEURA, Kurz in Journ. As. Soc. Beng. 1873, 219 ; Hf. Ind. Fl. II. 93.

HAB. Pegu (Brandis), probably a laterite plant.

11. I. GALEGOIDES, DC. Prod. II. 225 ; Miq. Fl. Ind. Bat. I. 310 ; Hf. Ind. Fl. II. 100. (*I. uncinata*, Roxb. Fl. Ind. III. 382 ; *I. Zollingeriana*, Miq. Fl. Ind. I. 310 ? *teste* Baker).

HAB. Not unfrequent in the open, and more especially in the hill-eng-forests, of Martaban down to Tenasserim, up to 4000 feet elevation ; also Pegu, Rangoon (Wall.).—Fl. RS. ; Fr. CS.

12. I. PULCHELLA, Roxb. Fl. Ind. III. 382 ; Wight Icon. t. 367 ; Bedd. Fl. Sylv. 85. Anal. t. 12. f. 1. ; Hf. Ind. Fl. II. 101, in part only. (*I. purpurascens*, Roxb. Fl. Ind. III. 383 ? *I. arborea*, Roxb. l. c. 318 ; Wight Icon. t. 368.)

HAB. Not unfrequent in the dry and open (chiefly the eng-) forests from Ava and Prome down to Pegu and Martaban.—Fl. Fr. C. and HS.

N. B. I. VIOLACEA, Roxb. l. c. 380, differs from the above in the pod and the cylindrically oblong pale-coloured seeds. It is in my eyes nearer akin to *I. elliptica*, from which it deviates only in the size and colour of the seeds.

13. I. ELLIPTICA, Roxb. Fl. Ind. III. 380.

HAB. Pegu, Rangoon (Cleghorn) ; Karen country (O'Riley) ; Tenasserim, Salween (Wall.).—Fr. CS.

Sesbania, Pers.

Conspectus of Species.

Subg. 1. Agati, Desv. Flowers 2—3 in. long, falcately recurved in bud, the standard acute or bluntnish.

Small glabrous tree ; flowers showy, white or scarlet, *S. grandiflora*.

Subg. 2. Eu-Sesbania, Bth. Flowers less than an inch long, straight in bud, yellow or brown-purple, the standard broad, more or less notched.

* *Racemes drooping from the base. Small trees.*

Glabrous ; pods $1\frac{1}{2}$ —2 lin. broad, somewhat angular from the prominent sutures,

.. *S. Ægyptiaca*.

* * *Racemes erect from the base, but often overhanging. Shrubby annuals.*

Pods rather convex on both sides, $1\frac{1}{2}$ —2 lin. broad ; standard $\frac{1}{2}$ in. long ; seeds cylindrical,..... *S. aculeata*.

Pods rather flat, 2—3 lin. broad, narrowly bordered ; standard $\frac{2}{3}$ in. long, seeds more or less compressed-rhomboid, *S. Cochinchinensis*.

*1. *S. GRANDIFLORA*, Pers. Syn. II. 316 ; Bth. Fl. Austr. II. 212 ; Hf. Ind. Fl. II. 115. (*Agati grandiflora*, Desv. in Journ. Bot. III. 120 ; Griff. Not. Dicot. 438 ; *Æschynomene grandiflora*, Roxb. Fl. Ind. III. 331).

HAB. Only planted, but generally found in villages all over Burma.—Fl. RS.

*2. *S. ÆGYPTIACA*, Pers. Ench. II. 316 ; Wight Icon. t. 42 ; Bedd. Fl. Sylv. 86. Anal. t. 12. f. 3 ; Hf. Ind. Fl. II. 114. (*Æschynomene sesban*, L. sp. pl. 1061 ; Roxb. Fl. Ind. III. 332 ; *S. picta*, Pers., Bot. Mag. t. 873).

HAB. Generally planted in villages all over Burma.—Fl. Fr. Jan.—May.

3. *S. ACULEATA*, Pers. Enchir. II. 316 ; Hf. Ind. Fl. 115. (*Æschynomene spinulosa*, Roxb. Fl. Ind. III. 333 ; *S. polyphylla*, Miq. in Fl. Ind. Bat. I. 288 ; *Æschynomene cannabina*, Roxb. Fl. Ind. III. 335, non Pers.)

HAB. Rather frequent in long-grassed pastures and savannahs of the Kolodyne valley, Arracan.—Fl. Octob.

4. *S. COCHINCHINENSIS*, DC. Prod. II. 266 ; Miq. Fl. Ind. Bat. I. 287 ? (*Æschynomene paludosa*, Roxb. Fl. Ind. III. 333 ; *Sesbania cannabina*, Pers. Enchir. II. 316 ; WA. Prod. I. 215 ; *S. aculeata*, var. *cannabina*, Bak. in Hf. Ind. Fl. II. 115).

HAB. Not unfrequent in swamps and swampy pastures all over the plains of Pegu ; also Chittagong.—Fl. Octob. ; Fr. CS.

The Pegu plant is much smaller, and has the broad flat pod of this species and the habit and seeds of *S. aculeata*, but much fewer leaflets.

Tephrosia, Pers.

Conspectus of Species.

* *Flowers in axillary or leaf-opposed racemes, rarely reduced to 2 or a few only.*

Leaves unpaired-pinnate, rarely simple.

× Calyx-teeth short, deltoid. (*Brissonia*, Neck.)

Shrub, silky pubescent ; corolla $\frac{3}{4}$ —1 in. long, white ; racemes terminal and lateral ; pod appressed silk-hairy, *T. candida*.

× × Calyx-teeth narrow, cuspidate, as long as the calyx-tube. Annuals or undershrubs. (*Reinera*, Moench.)

+ Flowers in racemes.

O Racemes peduncled, leaf-opposed (and terminal).

Almost glabrous or very thinly appressed silk-hairy; pods glabrous or nearly so,

.. *T. purpurea*.

O O Racemes axillary (and terminal), sometimes reduced.

Apparently similar to the preceding, but racemes short or reduced to a few (2) flowers only, *T. pauciflora*.

Racemes long-peduncled, many-flowered; leaves pinnate, leaflets in 3—6 pairs, appressed silvery silk-hairy; pods glabrescent, *T. tinctoria*

Racemes long-peduncled, many-flowered; leaves pinnate, leaflets in 6—9 pairs, thinly appressed silk-hairy; pods densely brownish silk-hairy, *T. Hookeriana*.

Racemes long-peduncled, few-flowered at the apex; leaves simple, or with a pair of diminutive basal leaflets; rest as in *T. tinctoria*, *T. Grahamii*.

+ + Flowers solitary or by pairs in the leaf-axils.

Silvery silk-hairy; leaflets in 2—3 pairs; pods appressed silvery pubescent,

.. *T. senticosa*.

* * Flowers solitary or paired in the leaf-axils, very small. Leaves simple. (*Macronyx*, Dalz.).

All parts thinly silk-hairy; leaves linear; peduncle capillary, *T. tenuis*.

1. *T. CANDIDA*, DC. Prod. II. 249; Hf. Ind. Fl. II. 111. (*Kiesera sericea*, Rwdt. in Miq. Fl. Ind. Bat. I. 291).

HAB. Chittagong, Martaban and Tenasserim (*teste* Baker).

2. *T. PURPUREA*, Pers. Ench. II. 329; Hf. Ind. Fl. II. 112, in part. (*Galega purpurea*, L. sp. pl. 1063; Roxb. Fl. Ind. III. 386; *Galega lancaefolia*, Roxb. l. c.).

HAB. Common in grassy lands, in shrubbery, along river- and roadsides, etc., also in savannahs, all over Burma, from Chittagong and Ava down to Tenasserim.—F. RS., Fr. CS.

2. *T. PAUCIFLORA*, Grah. in Wall. Cat. 5635; Hf. Ind. Fl. II. 114,

HAB. Ava, Paghmyo (Wall.)—Unknown to me.

3. *T. TINCTORIA*, Pers. Enchir. II, 329; Wight Icon. t. 388; Hf. Ind. Fl. II. 111. (*Galega tinctoria*, L. sp. pl. 1063; Roxb. Fl. Ind. III. 386; *Galega Heyneana*, Roxb. l. c. 384).

Var. *a. GENUINA*, the indument more or less tawny; leaflets oblong to elliptically oblong.

Var. *β. COCCINEA*, Bak. in Hf. Ind. Fl. II. 112. (*T. coccinea*, Wall. Pl. As. rar. t. 60), the indument silvery white; leaflets short and more or less obovate, the base usually cuneate.

HAB. VAR. *β.* only, Ava, along the banks of the Irawaddi, apparently common.—Fl. Fr. RS.

4. *T. GRAHAMII*, Wall. Cat. 5652 (*T. tinctoria*, var. *Grahamii*, WA. Prod. I. 211).

HAB. Rather frequent in the eng-forests of the Prome District.—Fl. RS.; Fr. CS.

5. *T. SENTICOSA*, Pers. Syr. II. 330; Wight Icon. t. 370; Hf. Ind.

Fl. II. 112. (*Galega senticosa*, L. Amoen III. 19 ; *Galega pentaphylla*, Roxb. Fl. Ind. III. 384).

HAB. Ava, Yenang-choung (Wall.) *teste* Baker.

6. T. TENUIS, Wall. Cat. 5970 ; Hook. in Journ. Bot. II. 35 in adn. ; Hf. Ind. Fl. II. 111.

HAB. Ava, Segain, limestone-hills (Wall.).—Fr. Nov.

Millettia, WA.

Conspectus of Species.

Subg. 1. Notho-Millettia, Miq. Stamens diadelphous (9 + 1 and 7 + 1). Seeds usually not compressed.—Trees.

Glabrous ; corolla purple, glabrous ; stamens 9 + 1 ; pods coriaceous, the valves very convex and smooth, *M. atropurpurea*.

Subg. 2. Eu-Millettia, Bak. Stamens monadelphous, the 10th vexillary stamen more or less free at the base only. Seeds much compressed.

* *Standard not auricled at the base.*

× Trees.

× Valves of pod without prominent ledges or wings on the margins, flat or slightly convex, glabrous or nearly so.

O Pod-valves not rough from warts or lentils.

Young parts and leaves beneath slightly pubescent ; corolla glabrous, lilac ; pods appressed puberulous, *M. pulchra*.

Young parts slightly pubescent ; corolla pubescent, lilac ; pods glabrous, *M. Brandisiana*.

Leaves beneath sparingly appressed grey-hairy ; corolla glabrous ; pod obscurely “grey-canescent,” *M. cana*.

O O Pod-valves rough from warts or lentils, glabrous.

Young shoots silky pubescent ; corolla glabrous, white ; pods thick, lenticellate-rough, *M. leucantha*.

Glabrous ; corolla glabrous, blue ; pod thick, warted, *M. ovalifolia*.

× × Valves of pod extended into prominent ledges or wings.

Young shoots slightly pubescent ; leaflets bluntish acuminate ; racemes almost glabrous ; corolla steel-blue, glabrous ; pods sharply edged, *M. glaucescens*.

As preceding, but racemes pubescent ; corolla white, glabrous ; pods unknown, *M. pubinervis*.

Shortly tomentose, especially while young ; leaflets rounded at the apex ; corolla pale blue, glabrous ; pods with 4 waved marginal wings, *M. tetraptera*.

+ + Woody climbers.

× Corolla glabrous. Ovary more or less pubescent. Pod glabrous.

Young shoots and leaves beneath pubescent ; calyx broader than deep ; corolla white ; pods fleshy coriaceous, torose, *M. pachycarpa*.

As preceding, but glabrescent ; flowers much smaller, lilac ; calyx longer than wide ; pod unknown, *M. monticola*.

× × Corolla, at least the standard, velvety or silky pubescent outside.

Leaves glabrous ; flowers racemose, in terminal panicles ; pods torose, tawny velvety, *M. cinerea*.

Leaves appressed silvery or coppery silk-hairy beneath ; flowers in lateral racemes ; pods flat, not torose, brown-velvety, *M. sericea*.

Leaves glabrous ; flowers in axillary short peduncled racemes ; pods brown velvety,
 .. *M. coerulea*.

* * Standard auricled at the base on both sides of the claw.

× Corolla glabrous.

Young shoots rusty tomentose ; corolla violet ; ovary quite glabrous, *M. leiogyna*.

× × Corolla, at least the standard, velvety or silky pubescent outside.

O Leaflets blunt or apiculate, rarely shortly acuminate. Branches brown.

Flowers purple ; racemes elongate, longer than the petiole ; pods glabrous when fully ripe, *M. extensa*.

Flowers white ; racemes elongate, much longer than the petiole ; pods tawny or brown tomentose even when fully ripe, *M. macrophylla*.

Flowers rose-coloured ; racemes much shorter than the petiole ; leaflets obtuse ; pods tawny or brown tomentose, *M. fruticosa*.

O O Leaflets glaucous beneath, long- and caudate-acuminate. Branches grey.

Low scandent shrub, almost glabrous ; flowers, *M. caudata*.

1. *M. ATROPURPUREA*, Bth. in Pl. Jungh. I. 249 in adn. ; Hf. Ind. Fl. II. 108. (*Pongamia atropurpurea*, Wall. Pl. As. rar. I. 70. t. 78 ; *Pongamia* sp. Griff. Not. Dicot. 444).

HAB. Rather frequent in the tropical forests along the eastern and southern slopes of the Pegu Yomah and from Martaban down to Tenasserim.—Fl. Jan.—March ; Fr. May, June.

M. paniculata, Miq. Fl. Suppl. Fl. Sumatr. 301, differs only in its larger and more flattened pods ; the seeds in my specimens are not developed. Miquel ascribes to this species a very abnormal diadelphism, viz. 7 + 1. *M.* sp. No. 1. from Malacca in Hf. Ind. Fl. II. 110 is apparently the same. *Pongamia glandulosa*, Griff. Not. Dicot. 443, from Mergui, remains doubtful to me, the more so as Griffith says nothing of the stamens, while he describes 10 hypogynous glands (abortive stamens?) surrounding the ovary ; he compares the tree to *M. atropurpurea*.

2. *M. PULCHRA*, Kurz in Journ. As. Soc. Beng. 1873. 69. sub 138 and Pegu Report A. 45 ; Hf. Ind. Fl. II. 104. (*Mundulea pulchra*, Bth. in Pl. Jungh. I. 248 in adn.).

HAB. Ava Hills (Griffith).

3. *M. BRANDISIANA*, Kurz in Journ. As. Soc. Beng. 1873, 69 ; Hf. Ind. Fl. II. 108.

HAB. Frequent in the upper mixed forests of the Pegu Yomah.—Fl. March—Apr. ; Fr. Jan. Febr.

Closely allied to the preceding species.

4. *M. CANA*, Bth. in Hf. Ind. Fl. II. 105. (*Pongamia cana*, Grah. in Wall. Cat. 5903 ; Bth. in Pl. Jungh. 250 in adn.).

HAB. Ava, banks of the Irrawaddi at Yenang choung (Wall.).

I do not know what authority Baker has for calling this species a climber.

5. *M. LEUCANTHA*, Kurz in Journ. As. Soc. Beng. 1873, 68. (*M. pendula*, Bak. in Hf. Ind. Fl. II. 105 ; *Pongamia pendula*, Grah. in Wall. Cat. 5902 ; Bth. in Pl. Jungh. 250 in adn., nomen enigmaticum).

HAB. Frequent in the dry and open forests, less so in the upper mixed forests, all over Prome and the Pegu Yomah, up to 2000 ft. elevation.—Fl. March, Apr ; Fr. Apr., May.

6. *M. OVALIFOLIA*, Kurz in Journ. As. Soc. Beng. 1873, 68, excl. syn. *teste* Baker ; Hf. Ind. Fl. II. 107.

HAB. Not unfrequent in the dry forests of the Prome district, where it occasionally enters the savannah forests.—Fl. Fr. March, Apr.

7. *M. GLAUDESCENS*, Kurz in Journ. As. Soc. Beng. 1873, 67 ; Hf. Ind. Fl. II. 107.

HAB. Frequent in the tropical and moister upper mixed forests of the eastern slopes of the Pegu Yomah and of Martaban.—Fl. Apr., May ; Fr. May, June.

8. *M. PUBINERVIS*, Kurz in Journ. As. Soc. Beng. 1873, 68 ; Hf. Ind. Fl. II. 106.

HAB. Martaban, rather rare in the upper mixed forests of Toukye-ghat, east of Tounghoo.—Fl. Apr.

Very nearly allied to the preceding species, chiefly differing in its smaller and longer acuminate leaflets, and in the colour of the flowers and pubescence. The pods are still unknown.

9. *M. TETRAPTERA*, Kurz in Journ. As. Soc. Beng. 1873, 69 ; Hf. Ind. Fl. II. 106.

HAB. Not unfrequent in the dry forests of Prome and Ava.—Fl. Apr.

10. *M. PACHYCARPA*, Bth. in Pl. Jungh. I. 250 ; Hf. Ind. Fl. II. 106.

HAB. Ava, Khakyen Hills (J. Anderson).—Fl. Apr.

11. *M. MONTICOLA*, Kurz in Journ. As. Soc. Beng. 1873, 67 ; Hf. Ind. Fl. II. 106.

HAB. Martaban, in the stunted hill- and the pine-forests of the Nattoung hills, at 6500—7100 ft. elevation.—Fl. March.

N. B. Occurs also at Darjeeling, Sikkim, at 7000 ft. elevation (S. Gamble).

12. *M. CINEREA*, Bth. in Pl. Jungh. I. 249 in adn. ; Hf. Ind. Fl. II. 106. (*Robinia paniculata*, Roxb. MS. Icon. XX. t. 151, No. 2543 ; *Pongamia heterocarpa*, Wall. ap. Voigt. Cat. Hort. Calc. 240).

HAB. Ava (Wall.) ; Chittagong.—Fl. May.

13. *M. SERICEA*, WA. Prod. I. 263 in adn. ; Hf. Ind. Fl. II. 104. (*Pongamia sericea*, Vent. Malm. No. 28 ; DC. Prod. II. 416 ; *Dalbergia angustifolia*, Hassk. Pl. Jav. rar. 399, *teste* Baker).

HAB. Along choungs in the tropical forests of Martaban, east of Tounghoo.—Fl. May.

14. *M. CÆRULEA*, Bak. in Hf. Ind. Fl. II. 107.

HAB. Upper Tenasserim, at Phanoe (Wall.).—Unknown to me.

15. *M. LEIOGYNA*, Kurz in Journ. As. Soc. Beng. 1873, 67 ; Hf. Ind. Fl. II. 109.

HAB. Martaban, in an upper mixed forest at Nakawa choung, Toukyeghat east of Tounghoo.—Fl. Apr.

16. *M. EXTENSA*, Bth. in Hf. Ind. Fl. II. 109. (*Otosema extensa*, Bth. in Pl. Jungh. I. 249 ; Walp. Ann. IV. 580).

HAB. Frequent in the leaf-shedding forests up to 2000—3000 feet elevation, all over Burma, from Ava and Martaban down to Upper Tenasserim.—Fl. March, Apr. ; Fr. CS.

A species not clearly distinct from *M. macrophylla* (*Otosema macrophylla*, Bth. in Pl. Jungh. I. 249 ; *Robinia macrophylla*, Roxb. Fl. Ind. III. 329 ; *M. auriculata*, Baker in Hf. Ind. Fl. II. 108), and probably only an Indo-Chinese form of it.

17. *M. FRUTICOSA*, Bth. in Hf. Ind. Fl. II. 109. (*Otosema fruticosa*, Bth. in Pl. Jungh. I. 249 ; *Robinia fruticosa*, Roxb. Fl. Ind. III. 328).

HAB. Pegu (*teste* Baker).

18. *M. CAUDATA*, Bak. in Hf. Ind. Fl. II. 109. (*Otosema caudata*, Bth. in Pl. Jungh. I. 249 ; *Tephrosia urophylla*, Wall. ap. Voigt. Hort, Calc. 216).

HAB. Martaban, creeping and twining in the rocky bed of the Toukyeghat river, east of Tounghoo.

I have leaf-specimens only. These have the leaflets broader than in the normal form, but in other respects they perfectly agree with the Assam plant.

Pongamia, Vent.

1. *P. MITIS*, (*Robinia mitis*, L. sp. pl. 1044 ; *P. glabra*, Vent. Hort. Malmais. I. t. 28 ; Wight Icon. t. 59 ; Bedd. Fl. Sylv. Madr. t. 177 ; Hf. Ind. Fl. II, 240 ; *Galedupa Indica*, Lamk. Encycl. Méth. II. 594 ; Roxb. Fl. Ind. III. 239).

HAB. Frequent in the tidal and beach-forests all along the coasts, from Chittagong down to Tenasserim and the Andamans.—Fl. Febr. March ; Fr. RS.

Derris, Lour.

Conspectus of Species.

Subg. 1. Brachypterum, WA. (*Eu-Derris*, Bth.). Standard equally tapering at the base, with or without 2 basal callosities. Stamens monadelphous. Pods narrowly winged along the vexillary suture only.

* *Standard without basal callosities.*

× Flowers in simple or almost simple racemes.

+ Pods lanceolate, acuminate or acute at both ends.

Erect tree ; leaflets almost acute, mucronate, *D. robusta*.

Scandent shrub ; leaflets notched, *D. scandens*.

+ + Pods oblong or orbicular, with rounded ends. Scandent shrubs.

All parts, also the pods, glabrous, *D. uliginosa*.

Rusty pubescent ; pods pubescent, *D. elegans*.

× × Flowers racemose, collected into panicles.

Scandent, glabrous ; pods sinuately constricted between the seeds ; corolla $\frac{1}{2}$ in long,

.. *D. sinuata*.

* * *Standard with 2 basal callosities (Paraderis, Miq.)*

Scandent, young shoots densely silk-hairy ; flowers 10 lin. long ; ovary villous, *D. elliptica*.

Subg. 2. Aganope, Miq. (Dipteroderris, Bth.) Standard equally narrowed at the base and without callosities. Stamens monadelphous, or the vexillary one free. Pods more or less distinctly winged at both sutures.

Scandent, glabrous ; lateral nerves beneath very faint, immersed, *D. amoena*.

1. *D. ROBUSTA*, Bth. in Linn. Proc. IV. Suppl. 104. (*Dalbergia robusta*, Roxb. Hort. Beng. 53 ; DC. Prod. II. 417 ; Wight Icon. t. 244 ; *Dalbergia Krowee*, Roxb. Fl. Ind. III. 229).

HAB. Not unfrequent in the upper and lower mixed forests of Pegu ; Ava ; also Andamans.—Fl. Apr.

2. *D. SCANDENS*, Bth. in Linn. Proc. IV. Suppl. 103 ; Hf. Ind. Fl. II. 240. (*Dalbergia scandens*, Roxb. Corom. Pl. II. t. 192 and Fl. Ind. III. 232 ; *Brachypterum scandens*, WA. in Wight Icon. t. 275).

HAB. Frequent in the tidal and swamp-forests, but also entering the savannah-forests, of the alluvial lands, all over Burma, from Chittagong, Prome, and Martaban down to Tenasserim and the Andamans.—Fl. Jun. Jul. ; Fr. CS.

3. *D. ULIGINOSA*, Bth. in Pl. Jungh. I. 252. and in Linn. Proc. IV. Suppl. 107. (*Pongamia uliginosa*, DC. Prod. II. 416 ; Hook Bot. Misc. III. 301. suppl. t. 41 sub *P. religiosa* and *P. triphylla* ; *Galedupa uliginosa*, Roxb. Fl. Ind. III. 243).

HAB. Frequent in the tidal forests and in low littoral lands, from Arracan down to Tenasserim and the Andamans.—Fl. March, May ; Fr. RS.

4. *D. ELEGANS*, Bth. in Pl. Jungh. I. 252 in adn. and in Linn. Proc. IV. Suppl. 109.

HAB. In the swamp-forests of the Irrawadi in Pegu, and along marshy streams in Tenasserim as far south as Mergui.—Fl. Febr. March.

5. *D. SINUATA*, Thw. Ceyl. Pl. 93 ; Bth. in Linn. Proc. IV. Suppl. 113. (*D. polyarthra*, Miq. Suppl. Fl. Sumatr. 298).

HAB. Not unfrequent in the tidal forests and in the beach-jungles of Pegu and Tenasserim.—Fr. Nov, Decb.

6. *D. ELLIPTICA*, Bth. in Linn. Proc. IV. Suppl. III (*Pongamia elliptica*, Wall. Pl. As. rar. III. 20. t. 237 ; Wight Icon. t. 420 ; *Galedupa elliptica*, Roxb. Fl. Ind. III. 242 ; *Pongamia volubilis*, Zoll. and Mor. Syst. Verz. 3 ; *Pongamia Horsfieldii*, Miq. Fl. Ind. Bat. I. 149).

HAB. Upper Tenasserim, Attaran and Moulmein (Wall.).

7. *D. AMOENA*, Bth. in Pl. Jungh. I. 252 in adn. and in Linn. Proc. IV. Suppl. 110.

HAB. Tenasserim, Moulmein to Mergui.—Fr. March.

Pterocarpus, L.

Conspectus of Species.

Pods about an inch across, almost glabrous (even while young), the stylose point far above the base ; calyx more glabrous, *P. Indicus*.

Pods almost $1\frac{1}{2}$ —2 in. in diameter, when young densely velvety-pubescent, the stylose point at the basal corner ; calyx rusty pubescent, *P. macrocarpus*.

1. *P. INDICUS*, Willd. sp. pl. III. 904 ; Roxb. Fl. Ind. III. 238 ; Bedd. Fl. Sylv. t. 23 ; Hf. Ind. Fl. II. 238. (*P. flavus*, Lour. Fl. Cochinch. II. 525 ; Miq. Fl. Ind. Bat. I. 136 ; *P. dalbergioides*, Roxb. Fl. Ind. III. 236 ; Wight Icon. t. 246).

HAB. Frequent in the tropical and the moister upper mixed forests, from Martaban down to Tenasserim and the Andamans ; rare along the eastern slopes of the Pegu Yomah.—Fl. May, Jun. ; Fr. Jul., Aug.

2. *P. MACROCARPUS*, Kurz in Journ. As. Soc. Beng. 1874, 187 ; Hf. Ind. Fl. II. 239.

HAB. Frequent in the eng- and the upper mixed forests, from Martaban down to Tenasserim ; very rare in the dry forests of the Prome District.—Fl. Apr. May ; Fr. RS.

There are, as the Rev. Dr. Mason remarks (Journ. As. Soc. Beng. 1848, 223 sqq.), two kinds of padouk in Burma, the “padouk nee” (red padouk) and the “padouk pyoo” (white padouk). I do not know whether these two varieties correspond to the two species here adopted.

Dalbergia, L.f.

Conspectus of Species.

Subg. 1. Dalbergaria, Bth. Stamens united into 2 separate sheaths of 5 each.

* *Erect trees.*

× Pods velvety.

Leaves bluntish acuminate ; panicles lax, puberulous ; flowers purple, *D. cana*.

× × Pods quite glabrous.

+ Leaflets rather large, apiculate, acute or acuminate.

Leaflets retuse-apiculate ; panicles lax, puberulous ; flowers white or purplish,

... *D. purpurea*.

Leaflets acute or shortly acuminate ; panicles short and compact ; calyx glabrous ; flowers white, *D. glomeriflora*.

+ + Leaflets blunt or retuse, rather small.

Panicle rather compact; pedicels short or very short; leaves nigrescent, . . . *D. nigrescens*.
 Panicle lax; pedicels slender; flowers white or purplish outside; leaves not nigrescent, *D. paniculata*.

* * *Woody climbers. (Leaflets blunt or retuse).*

Leaflets 11—13; panicles densely pubescent; bractlets minute, *D. volubilis*.

Leaflets 17—21; panicles glabrous; bractlets small but conspicuous, *D. stipulacea*.

Subg. 2. Sissoa, Bth. Stamens united into a single slit sheath.

* *Erect trees. Flowers white.*

× Bractlets fallen long before expansion of the flowers.

Leaflets 3—7, almost orbicular to obovate, notched or blunt; all parts glabrous,

... *D. latifolia*.

Young shoots appressed silky puberulous; leaflets 7—11, more or less oblong, notched,

or blunt, *D. cultrata*.

× × Bractlets black, short and broad, deciduous but still present at flowering time.

Leaflets blunt, more or less notched and mucronate, *D. glauca*.

Leaflets acuminate, smaller or more coriaceous, *D. ovata*.

* * *Woody climbers.*

× Leaflets in 5—7 pairs; inflorescence, etc., glabrous.

Flowers blue; panicle ample, terminal; leaflets more or less oblong, *D. foliacea*.

Flowers white; panicles small, axillary; leaflets more or less obovate, *D. rubiginosa*.

× × Leaflets in 11—41 pairs; inflorescence and young branchlets rusty pubescent.

Leaflets $\frac{1}{3}$ — $\frac{1}{2}$ in. long; panicles or cymes very short, *D. tamarindifolia*.

Leaflets 1—2 in. long; panicle ample, *D. velutina*.

1. *D. CANA*, Grah. in Wall. Cat. 5859; Kurz in Journ. As. Soc. Beng. 1873. 70; Hf. Ind. Fl. II. 237.

HAB. Not unfrequent in the tropical forests, especially along choungs, all along the eastern slopes of the Pegu Yomah, and from Martaban down to Upper Tenasserim.—Fl. March; Fr. CS.

2. *D. PURPUREA*, Wall. Cat. 5869; Bth. in Linn. Proc. IV. Suppl. 46 in part only; Hf. Ind. Fl. II. 235.

HAB. Frequent in all mixed forests from Pegu and Martaban down to Upper Tenasserim.—Fl. Febr. March; Fr. CS.

3. *D. GLOMERIFLORA*, Kurz in Journ. As. Soc. Beng. 1873, 70; Hf. Ind. Fl. II. 236.

HAB. Rare in the upper mixed forests of the Yomah in the Prome District, at 1000—2000 feet elevation.—Fl. March, Apr.

4. *D. NIGRESCENS*, Kurz in Pegu Rep. App. A. 48 and B. 45.

HAB. Frequent in the dry forests, especially the mixed ones, of Prome and Ava.

N. B. Occurs also in Hindustan, where (according to Dr. Brandis) it is a sacred tree. It is very near allied to the following, and in leaf and flowerless at the time when *D. paniculata* is leafless and in full bloom.

5. *D. PANICULATA*, Roxb. Corom. Pl. II. 8. t. 114 and Fl. Ind. III. 227; Hf. Ind. Fl. II. 236.

HAB. Rather frequent in the mixed dry forests of Ava and Prome, occasionally found also in the drier upper mixed forests of the Pegu Yomah.—Fl. March ; Fr. May, June.

6. *D. VOLUBILIS*, Roxb. Corom. Pl. II. 48. t. 191. and Fl. Ind. III. 231 ; Hf. Ind. Fl. II. 235.

HAB. Frequent in the mixed forests, especially the lower ones, occasionally also in the savannahs, all over Chittagong, Ava, and Martaban down to Upper Tenasserim.—Fl. Febr., March ; Fr. Apr., May.

7. *D. STIPULACEA*, Roxb. Fl. Ind. III. 233 ; Wight Icon. t. 243 ; Hf. Ind. Fl. II. 237. (*D. ferruginea*, Roxb. Fl. Ind. III. 228, *teste* Baker).

HAB. Common, not only in the mixed and tropical forests, but also ascending into the drier hill-forests, all over Pegu and Martaban down to Tenasserim, up to 3500 ft. elevation ; also Chittagong.—Fl. Jan., Febr. ; Fr. CS.

8. *D. LATIFOLIA*, Roxb. Corom. Pl. II. 7. t. 113, and Fl. Ind. III. 221 ; Wight Icon. t. 1156 ; Bedd. Fl. Sylv. t. 24 ; Hf. Ind. Fl. II. 231. (*D. emarginata*, Roxb. Fl. Ind. III. 224 ; *D. Javanica*, Miq. Fl. Ind. Bat. I. 132 ; Bth. in Linn. Proc. IV. Suppl. 38).

HAB. Andaman Islands (Roxburgh).

9. *D. CULTRATA*, Grah. in Wall. Cat. 5861 ; Hf. Ind. Fl. II. 233.

HAB. Common in all leaf-shedding forests, especially in the savannah- and eng-forests, all over Burma, from Ava and Martaban down to Upper Tenasserim.—Fl. March, Apr. ; Fr. CS.

10. *D. GLAUCA*, Wall. Cat. 5862. (*D. ovata*, var. *obtusifolia*, Bak. in Hf. Ind. Fl. II. 231).

HAB. Not unfrequent in the upper mixed forests, from the Pegu Yomah and Martaban down to Upper Tenasserim ; also Ava.—Fl. Jan., Febr. ; Fr. March, May.

11. *D. OVATA*, Grah. in Wall. Cat. 5854 ; Bth. in Linn. Proc. IV. Suppl. 39 ; Hf. Ind. Fl. II. 231.

Var. *α*. *GENUINA*, quite glabrous.

Var. *β*. *PUBERULA*, leaflets beneath and panicles puberulous.

HAB. Not unfrequent in the upper mixed forests, especially along choungs, from the Pegu Yomah and the Martaban Hills down to Upper Tenasserim ; var. *β*. Pegu, Irrawaddi district (Dr. Brandis).—Fl. Jan. Febr. ; Fr. Apr., May.

12. *D. FOLIACEA*, Wall. Cat. 5856 ; Bth. in Linn. Proc. IV. Suppl. 41 ; Hf. Ind. Fl. II. 232.

HAB. Not unfrequent along choungs, in the upper mixed forests of the Pegu Yomah, and from Martaban down to Upper Tenasserim ; also Ava.—Fl. Jan. Febr. ; Fr. CS.

13. *D. RUBIGINOSA*, Roxb. Corom. Pl. II. 9. t. 115 and Pl. Ind. III. 231; Hf. Ind. II. 232.

HAB. Not unfrequent in the tropical forests around the Kambala tounge, Pegu Yomah, probably on calcareous sandstone.

14. *D. TAMARINDIFOLIA*, Roxb. Hort. Bengh. 53 and Fl. Ind. III. 233; Wight Icon. t. 242; Hf. Ind. Fl. II. 234. (*Derris pinnata*, Lour. Fl. Coch. 432).

Hab. Not unfrequent in the forests of the Andamans; also Tenasserim.—Fl. May, June.

The pods of the Burmese species (= *D. rufa* and *multijuga*, Grah.) differ a good deal from those figured by Roxburgh, and they are much narrower. The pods of the Assam plant are unknown to me, but Mr. Simons calls it “a large tree 30 to 40 feet high.” The matter requires further inquiry.

15. *D. VELUTINA*, Bth. in Pl. Jungh. I. 255 in adn. and in Linn. Proc. IV. Suppl. 43; Hf. Ind. Fl. II. 233.

HAB. Frequent in the tropical forests, ascending into the hill-forests up to 4000 feet elevation, from Pegu and Martaban down to Tenasserim.—Fl. March.

Drepanocarpus, E. Mey.

Conspectus of Species.

Subg. 1. Eu-Drepanocarpus. Stamens united into a single sheath.

× Corolla glabrous. Pods usually 1-seeded. (*Selenotobium*, Bth.)

Leaflets $\frac{1}{2}$ in. long; calyx a line long, ...*D. spinosus*.

Leaflets about an in. long; calyx $1\frac{1}{2}$ lin. deep, ...*D. monospermus*.

× × Corolla pubescent outside. Pods usually 1-seeded. (American.)

Subg. 2. Pongamiopsis. Stamens united into 2 separate sheaths. Corolla glabrous. Pods 1—3-seeded, moniliform-constricted between the seeds.

Tree; panicles rusty villous; pod-joints smoothish, dimorphous, some flat and thick coriaceous, others very thick and fleshy, ...*D. reniformis*.

Arboreous climber; panicles almost glabrous; pod-joints flat and thick-coriaceous, wrinkled-veined, ...*D. Cumingii*.

1. *D. SPINOSUS*, (*Dalbergia spinosa*, Roxb. Fl. Ind. III. 233; Hf. Ind. Fl. II. 238)

HAB. Frequent in the tidal forests along the coasts from Chittagong down to Tenasserim.—Fl. May, June; Fr. CS.

This and the following are referred by Bentham to *Dalbergia*, but the pods are not winged and the cell-cavity extends from suture to suture. Strictly speaking the pods of *Dalbergia* cannot be called winged, for the broad thin margins of the pod are simply consolidated so as to leave (as in *Pterocarpus*) only a central cavity for the seed.

2. *D. MONOSPERMUS*, (*Dalbergia monosperma*, Dalz. in Kew. Journ. Bot. II. 36; Miq. Fl. Ind. Bat. I. 132. t. 3. f. D.; Hf. Ind. Fl. II. 237).

HAB. Tidal forests of Upper Tenasserim (Falconer).—Fl. March.

3. *D. RENIFORMIS*, Kurz in Pegu Rep. App. A. 49. and B. 45. (*Dalbergia reniformis*, Roxb. Fl. Ind. III. 226; Wight Icon. t. 261; Hf. Ind. Fl. II. 238; *Dalbergia flexuosa*, Grah. in Wall. Cat. 5875; Bth. in Linn. Proc. IV. Suppl. 48).

HAB. Frequent in the swamp-forests and around lakes and marshy grounds, especially in the alluvial lands, all over Pegu and Martaban down to Upper Tenasserim.—Fl. Febr. March; Fr. Apr.—June.

Curious on account of the joints being dimorphous on the same or on different pods. They are either normally thick-coriaceous and as flat as those of the following species, and have the seeds much compressed; or they are firmly fleshy and up to half inch thick, in which case the seeds are larger and scarcely compressed. This latter state is not attributable to the agency of insects, but seems to be normal development. The full-grown foliage so much resembles that of *Dep. inundatus*, Mart., that I should experience some difficulty in distinguishing between the two species when out of flower or fruit.

4. *D. CUMINGII*, (*Dalbergia Cumingii*, Bth. in Pl. Jungh. I. 255 in adn. and in Proc. Linu. Soc. IV. Suppl. 32; *D. Zollingeriana*, Miq. Fl. Ind. Bat. I. 130).

HAB. Tenasserim (or Andamans ?) (Helf. 1808.)

My plant is Miquel's *D. Zollingeriana*, which Bentham connects with the Philippine plant.

Cassia, L.

Conspectus of Species.

Subg. 1. Fistula, DC. Filaments of the 3 lower stamens very long and arcuate the others short or imperfect. Pod terete, elongate, indehiscent. Seeds horizontal.

* *Racemes slender and elongate, drooping, destitute of bracts. Flowers yellow.*

All adult parts glabrous; calyx very deciduous, velvety; petals about an inch long,

... *C. Fistula*.

* * *Racemes often corymb-like, more or less erect, with persistent bracts. Flowers pale or intensely pink-coloured. (Longer filaments thickened node-like at middle).*

Leaflets shortly acuminate, on petiolules 1—2 lin. long; bracts narrowly lanceolate,

... *C. nodosa*.

Leaflets retuse or blunt, pubescent, almost sessile; bracts cordate-ovate, ... *C. renigera*.

Subg. 2. Senna. Perfect anthers 7 or 10, opening by terminal pores or short slits. Pods opening along one or both sutures. Seeds transverse or oblique.

* *Pods usually not elastically opening. Funicle of seed filiform. (Senna genuina.)*

× *Pods compressed and often flat, sometimes winged. (Chamaesenna).*

+ *Perfect stamens 10 (Psilorhegma).*

Leaflets bluntish or rounded, more or less glaucous beneath; flowers yellow, in corymb-like racemes; bracts small, persistent; pods black, very flat, shortly stalked,

... *C. glauca*.

- + + Perfect stamens 7. Pods much compressed. Flowers yellow.
O Pods not winged.

† Pods straight and acute. Trees or shrubs.

△ Stipules none or very deciduous. Trees. Petals
 $\frac{1}{2}$ in. long.

Adult parts glabrous; bracts small, persistent, obovate with a subulate point longer than the blade; leaflets in 6—10 pairs, $1\frac{1}{2}$ —2 in. long; pods velvety, *C. Siamea*.

All parts pubescent; bracts leafy, broad-ovate, about $\frac{1}{3}$ in. long; leaflets in 10—20 pairs, $1-1\frac{1}{4}$ in. long; pods glabrous, *C. Timoriensis*.

△. △ Stipules large, cordate-semilunate, persistent.

More or less pubescent; leaflets in 8—10 pairs, $\frac{1}{2}$ — $\frac{3}{4}$ in. long; bracts ovate to obovate lanceolate, 3—4 lin. long; petals nearly an in. long; pods shortly and rather thinly pubescent, *C. auriculata*.

† † Pods lunate.

Glabrous perennial; calyx glabrous; petals 3—4 lin. long; pods shortly stalked, glabrous, *C. obovata*.

O O Pods broadly 4-winged. Flowers large, orange-yellow.

Shrubby herb, almost glabrous; leaves abruptly pinnate, the rachis almost winged-angular; bracts yellow, obovate-oblong, about an in. long, deciduous; pods glabrous, *C. alata*.

× × Pods more or less terete to 4-gonous. Seeds transverse, oblique or rarely parallel with the valves. (Herbs; flowers yellow).

+ Seeds transverse or oblique.

Leaves abruptly 4 pinnate, glabrous, leaflets in 4—12 pairs, acuminate; calyx glabrous; petals about $\frac{1}{2}$ in. long; ovary glabrous, *C. occidentalis*.

+ + Seeds parallel with the valves.

Leaves abruptly pinnate, leaflets in 3—2 pairs, blunt; petals nearly $\frac{1}{2}$ in. long; ovary shortly pubescent, *C. Tora*.

* * Pods opening elastically at both sutures. Funicle very short. Perfect anthers 10 or fewer by abortion, opening by slits. Herbs; flowers yellow, small (*Lasioregma*).

More or less prostrate; leaflets in 8—15 pairs, $2\frac{1}{2}$ — $3\frac{1}{2}$ lin. long; basal gland of rachis long-stalked; pedicels 1—2 lin. long, *C. pumila*.

Erect, branched; leaflets in 15—30 pairs, 1—3 lin. long; basal glands of rachis sessile; pedicels up to $\frac{1}{2}$ — $\frac{3}{4}$ in. long, *C. mimosoides*.

1. *C. FISTULA*, L. sp. pl. 440; WA. Prod. I. 285; Roxb. Fl. Ind. II. 333; Bth. in Linn. Trans. XXVII. 514. (*Cathartocarpus Fistula*, Pers. Syn. I. 459; Wight Icon. t. 269; *C. rhombifolia*, Roxb. Fl. Ind. II. 334).

HAB. Frequent in the leaf-shedding forests, especially in the savannah and mixed ones, all over Burma and adjacent provinces.—Fl. Apr.; Fr. CS.

2. *C. NODOSA*, Ham. in Roxb. Fl. Ind. II. 336; Wight Icon. t. 410; Bth. in Linn. Trans. XXVII. 517. (*Cathartocarpus nodosus*, Voigt Hort. Suburb. Calc. 248.)

HAB. Rather rare in the tropical forests of Martaban down to Upper Tenasserim; also Chittagong.—Fl. Apr.; Fr. CS.

3. *C. RENIGERA*, Wall. Cat. 5307; Bth. in Linn. Trans. XXVII. 518; Kurz in Journ. As. Soc. Beng. 1873. 71.

HAB. Not unfrequent in the dry forests of Prome and Ava; also Martaban? (Poungloungh hills above 2000 feet, Dr. Brandis).—Fl. Apr. Fr. Nov.

4. *C. GLAUCA*, Lamk. Dict. I. 647; Bth. in Linn. Trans. XXVII. 555. (*Senna arborescens*, Roxb. Fl. Ind. II. 345; *Senna speciosa*, Roxb. l. c. 347; *C. suffruticosa*, Koen. in Roth. Nov. sp. pl. 213).

Var. *a.* GENUINA, all parts more glabrous; leaflets larger, bluntish or acute, more glaucous beneath.

Var. *β.* KENIGII, (*C. fruticosa*, Koen. l. c.; *C. speciosa*, Roxb. l. c.), the young parts more pubescent; leaflets $\frac{1}{2}$ —1 in. only long, retuse or rounded, less glaucous beneath.

HAB. Var. *a.* not unfrequent in the dry forests of Ava and Prome, especially along the courses of rivers, var. *β.* only seen cultivated around khyoungs, etc., in Pegu.—Fl. Fr. ∞.

5. *C. SIAMEA*, Lamk. Dict. I. 648; Bth. in Linn. Trans. XXVII. 549. (*C. florida*, Vhl. Symb. III. 57; *C. Sumatrana*, Roxb. Hort. Beng. 31; DC. Prod. II. 506; *Senna Sumatrana*, Roxb. Fl. Ind. II. 347).

Var. *a.* GENUINA, leaves glabrous, the leaflets more glaucous beneath; a large tree.

Var. *β.* PUBERULA, rachis of leaves puberulous, leaflets puberulous (especially while young) but less glaucescent beneath; a low rather stunted tree.

HAB. Var. *a.* rather frequent in the mixed forests (chiefly the upper ones) from Chittagong and Ava down to Tenasserim; var. *β.* restricted to the forests of Ava and Prome.—Fl. Nov. Jan.; Fr. March, Apr.

6. *C. TIMORIENSIS*, DC. Prod. II. 499; Miq. Fl. Ind. Bat. I. 99; Bth. in Linn. Trans. XXVII. 550. (*C. palmata*, Wall. Cat. 5306; Walp. Rep. I. 827).

HAB. Frequent in the mixed and dry forests, but more especially along choungs in the upper mixed forests, all over Burma, from Ava down to Tenasserim.—Fl. Sept. Oct.; Fr. CS.

7. *C. AURICULATA*, L. sp. pl. 542; Bth. in Linn. Trans. XXVII. 547. (*Senna auriculata*, Roxb. Fl. Ind. II. 349).

HAB. Apparently frequent in the Irrawaddi valley of Ava.—Fl. Sept. —Febr.

8. *C. OBOVATA*, Collad. Hist. Cass. 92. t. 15; Bth. in Linn. Trans. XXVII. 553. (*Senna obtusa*, Roxb. Fl. Ind. II. 344; *Cassia obtusa*, Roxb. Hort. Bengh. 31; Wight Icon. t. 757).

HAB. Ava, Yenang-choung in the Irrawaddi valley (Wall.).

9. *C. ALATA*, L. sp. pl. 541; Wight Icon. t. 253; Bth. in Linn.

Trans. XXVII. 550 ; Griff. Not. Dicot. 448. (*Senna alata*, Roxb. Fl. Ind. II. 349).

HAB. Generally cultivated all over Burma, and often springing up in waste places and poonzohs ; apparently wild in Tenasserim.—Fl. Nov.—Decb. ; Fr. Febr.

10. *C. OCCIDENTALIS*, L. sp. pl. 539 ; Bot. Reg. t. 83 ; Bth. in Linn. Trans. XXVII. 532. (*Senna occidentalis*, Roxb. Fl. Ind. II. 343 ; *C. Sophora*, L. sp. pl. 542 ; Bth. l. c. ; *Senna Sophora*, Roxb. l. c. 347).

HAB. Common in rubbishy places, along banks of rivers, in fallow fields and poonzohs, all over Burma and adjacent provinces.—Fl. Fr. ∞ .

11. *C. TORA*, L. sp. pl. 538 ; Bth. in Linn. Trans. XXVII. 535. (*Senna Tora*, Roxb. Fl. Ind. II. 340 ; *Senna toroides*, Roxb. l. c. 341).

Var. *a. GLABRA*, all parts glabrous or nearly so.

Var. *β . PUBESCENS*, all parts appressedly (often greyish) pubescent.

HAB. Common, not only in the leaf-shedding forests, but also in waste places, along river-sides, on neglected culture-land, etc., all over Burma and the adjacent provinces ; var. *β .* in similar places in the dry Prome district.—Fl. Fr. ∞ .

12. *C. PUMILA*, Lamk. Dict. I. 651 ; Bth. in Linn. Trans. XXVII. 570. (*Senna prostrata*, Roxb. Fl. Ind. II. 352).

HAB. Prome district, in the dry forests.—Fl. Fr. Close of RS.

13. *C. MIMOSOIDES*, L. sp. pl. 543 ; Vog. in Linn. XI. 714 ; Bth. in Linn. Trans. XXVII. 579.

Var. *a. TYPICA*, Bth. l. c. (*C. angustissima*, Lamk. Dict. I. 650 ; *C. mimosoides*, var. *Telfairiana*, Hook. Bot. Mag. t. 5874 ; *Senna sensitiva* and *S. tenella*, Roxb. Fl. Ind. II. 353 and 354), leaves almost sessile, the rachis often marginate ; leaflets only about a line long, very narrow ; pods nearly glabrous. All parts more or less glabrous.

Var. *β . ÆSCHYNOMENE*, Bth. l. c. (*C. myriophylla*, Wall. Cat. 5326 ; *C. mimosoides*, *β . myriophylla* and *auricoma*, Bth. l. c. ; *Senna dimidiata*, Roxb. Fl. Ind. II. 352), leaves on a short pubescent petiole ; leaflets 2—3 lin. long, broader or narrower oblong to linear, the rachis marginate or not ; pods more copiously appressed pubescent, while young usually pilose from yellow soft spreading hairs.

HAB. Var. *a.* common amongst long grass in the jungle-pastures and savannahs, also entering the open and dry forests, all over Burma ; var. *β .* a shade-loving form in similar localities in Tenasserim.—Fl. Fr. R. and begin. of CS.

Bauhinia, L.

Conspectus of Genera.

* Trees or erect shrubs, without tendrils.

Subg. 1. Pileostigma, Hochst. Stamens 10, all fertile. Style very short or wanting, the stigma peltate. Flowers small.

Calyx valvate, the segments all free; glabrous trees, *B. Malabarica*.

Calyx spathaceous; young shoots and underside of leaves pubescent, *B. racemosa*.

Subg. 2. Eu-Bauhinia. Stamens 10, of which 5—9 sterile or reduced to staminodes, very rarely all 10 fertile.

× Calyx spathaceous.

+ Pods sessile or acuminate and barely stalked.

Pods minutely tomentose, *B. brachycarpa*.

Pods glabrous, *B. polycarpa*.

+ + Pods long-stalked.

Fertile stamen one only; leaves shortly pubescent beneath, *B. monandra*.

Fertile stamens 5; young shoots puberulous; leaves glabrous, *B. variegata*.

× × Calyx-lobes valvate, reflexed and free to the base, or only slightly cohering. Pods long-stalked.

+ Pods glabrous. Petals white or purple.

A shrub, the leaves minutely puberulous beneath; calyx in bud terete, .. *B. acuminata*.

A tree, the leaves glabrous; calyx angular in bud, irregularly bursting, .. *B. purpurea*.

+ + Pods brown-pubescent. Flowers yellow, turning orange-coloured.

Leaves velvety; a small tree, *B. elongata*.

* * Scandent shrubs, with hook-tendrils.

Subg. 3. Phanera. Lour. Calyx-tube more or less elongate. Calyx-lobes valvate, all expanding or becoming reflected, rarely the one or other cohering. Style more or less elongate.

× Ovary and pod glabrous.

O Pod stalked. Flowers racemose, large.

Leaves 2-foliolate, the leaflets free to the base; bracts or bractlets none, *B. diphylla*.

Leaflets united into a 2-cleft leaf; bractlets very large, almost leafy, *B. involucellata*.

O O Pod sessile. Flowers rather small, corymbose.

Lobes of the leaves rounded; pedicels and calyx glabrous, *B. glauca*.

Lobes of the leaves acuminate; pedicels and calyx appressed silk-hairy, .. *B. piperifolia*.

× × Ovary, and usually also the pod, villous, pubescent or puberulous.

O Pod and ovary sessile.

† Adult leaves glabrous, the lobes acuminate to acute and bluntish.

Racemes elongate, appressed silk-hairy; pedicels stout, *B. macrostachya*.

Racemes corymb-like contracted, sparingly puberulous; pedicels slender, *B. ornata*.

† † Leaves tomentose or pubescent, the lobes rounded.

All parts brown-tomentose or pubescent; petals an inch long; racemes elongate,

.. *B. VahlII*.

O O Pod and ovary stalked.

Flowers rose-coloured, in corymb-like racemes; style shorter than the ovary, villous, thick, *B. rosea*.

Flowers yellowish white to yellow, in short racemes ; style elongate, slender,

...*B. ferruginea*.

Subg. 4. Lasiobema, Korth. Calyx-tube almost none, the lobes tooth-like. Style very short. Pods 1—2-seeded.

Glabrous or nearly so ; ovary and pods glabrous, *B. anguina*.

1. *B. MALABARICA*, Roxb, Fl. Ind. II. 321 ; WA. Prod. I. 294. (*Pileostigma Malabaricum*, Bth. in Pl. Jungh. 261, in adn. ; Miq. Fl. Ind. Bat. I. 73).

HAB. Frequent in the upper mixed forests, rarely descending into the lower and the savannah forests, of Pegu ; and probably elsewhere.—Fl. Fr. CS.

2. *B. RACEMOSA*, Lamk. Encycl. Meth. I. 390, *non* Vhl. ; WA. Prod. I. 295 ; Bedd. Fl. Sylv. t. 182. (*B. parviflora*, Vhl. Symb. III. 55 ; Roxb. Fl. Ind. II. 323 ; *Pileostigma racemosum*, Bth. in Pl. Jungh. 262, in adn. ; Miq. Fl. Ind. Bat. I. 73).

HAB. Common in the dry forests of the Prome district ; most probably also in Ava.—Fl. Fr. March, Apr.

3. *B. BRACHYCARPA*, Wall. Cat. 5786 ; Bth. in Pl. Jungh. 261 in adn.

HAB. Ava, Taong-dong (Wall.).

Unknown to me. The brief and incomplete description does not allow even of a guess as to its affinities.

4. *B. POLYCARPA*, Wall. Cat. 5785 ; Bth. in Pl. Jungh. 261 in adn.

HAB. Frequent in the upper mixed forests, from Pegu and Martaban down to Upper Tenasserim.—Fl. Apr. May ; Fr. CS.

5. *B. MONANDRA*, Kurz in Journ. As. Soc. Beng. 1873, 73.

HAB. Burma, "Soeh doh" probably in Martaban or Upper Tenasserim (Brandis).

6. *B. VARIEGATA*, L. sp. pl. 535 ; Roxb. Fl. Ind. II. 319 ; WA. Prod. I. 296.—(*Phanera variegata*, Bth. in Pl. Jungh. I. 262 in adn. ; Miq. Fl. Ind. Bat. I. 60).

Var. *α. PURPURASCENS*, Voigt Cat. Hort. Calc. 253 (*B. variegata*, L. l. c. ; Roxb. l. c.), the 4 narrower petals purple, the fifth broader one tinged with cream and red.

Var. *β. CANDIDA*, Voigt l. c. (*B. candida*, Roxb. Fl. Ind. II. 318, *non* Ait.), the 4 narrower petals white or very pale purple, the fifth lower one somewhat sulphur-coloured in the centre, or purple towards the borders and yellow in the centre.

HAB. Var. *β.* chiefly, common in the dry forests and ascending into the upper dry forests of Ava and Prome ; Martaban, in the Yoonzeleen valley (Parish).—Fl. Febr. March ; Fr. CS.

7. *B. PURPUREA*, L. sp. pl. 536 ; Roxb. Fl. Ind. II. 320.—(*Phanera purpurea*, Bth. in Pl. Jungh. I. in adn. ; Miq. Fl. Ind. Bat. I. 60).

Var. *α*. GENUINA, flowers purple.

Var. *β*. TRIANDRA (*B. triandra*, Roxb. Fl. Ind. II. 320), flowers white, often with a yellowish blotch on the lower petal.

HAB. Var. *α*. sometimes planted in Burmese villages, as for example near Henzadah etc. ; var. *β*. Ava, banks of the Irrawaddi (Wall. Cat. 5797 L.)—Fl. CS.

8. *B. ACUMINATA*, L. sp. pl. 536 ; Roxb. Fl. Ind. II. 324 ; WA. Prod. I. 295 ; Miq. Fl. Ind. Bat. I. 74. (*B. isopetala*, Griff. Not. Dicot. 451).

HAB. Frequent in the open forests, especially the eng-forests, all over Burma.—Fl. March—May ; Fr. CS.

9. *B. ELONGATA*, Korth in Nat. Verh. Bot. 89. t. 24. (*Phanera elongata*, Bth. in Pl. Jungh. I. 262, in adn. ; Miq. Fl. Ind. Bat. I. 61 ; *B. molliissima*, Wall. Cat. 5782 ; *Phanera velutina*, Bth. in Pl. Jungh. I. 262, in adn. ; Miq. Fl. Ind. Bat. I. 63 ; *Bauhinia* sp., Griff. Not. Dicot. 451).

HAB. Pegu, in the tropical forests above Rangoon (Cleghorn) ; Tenasserim from Moulmein to Tavoy (Helf. 1872 ; Wall. etc.)—Fl. Decb. Jan.

10. *B. DIPHYLLA*, Symes Trav. to Ava t. 7.—(*Phanera diphylla*, Bth. in Pl. Jungh. 264, in adn. ; Miq. Fl. Ind. Bat. I. 70).

HAB. Frequent in the dry forests of Ava and Prome.—Fl. RS. ; Fr. ∞.

11. *B. INVOLUCELLATA*, Kurz in Journ. As. Soc. Beng. 1873, 72.

HAB. Martaban (Dr. Brandis).

12. *B. GLAUCA*, Wall. Cat. 5785 (*Phanera glauca*, Bth. in Pl. Jungh. 265 ; Miq. Fl. Ind. I. 68. t. 2).

HAB. Tenasserim, apparently frequent ; also tropical forests above Rangoon (Cleghorn).—Fl. March, Jan. ; Fr. Febr.

13. *B. PIPERIFOLIA*, Roxb. Fl. Ind. II. 327. (*Phanera glabrifolia*, Bth. in Pl. Jungh. 263, in adn.).

HAB. Tenasserim (Helf. 1879 and 1880).

NB. *B. LUCIDA*, Wall. (*Phanera lucida*, Bth. in Pl. Jungh. 262, in adn. = *B. cordifolia*, Roxb.).

14. *B. MACROSTACHYA*, Wall. Cat. 5774.—(*B. scandens*, Roxb. Fl. Ind. II. 326, non L. ; Wight Icon. t. 264).

HAB. Ava, Khakyen hills, east of Bhamo (J. Anderson).

15. *B. ORNATA*, Kurz in Journ. As. Soc. Beng. 1873, 72.

HAB. Frequent in the tropical forests, along choungs of the eastern slopes of the Pegu Yomah.—Fl. Febr.

16. *B. VAHLII*, WA. Prod. I. 297. (*Phanera VahlII*, Bth. in Pl. Jungh. 263, in adn. ; Miq. Fl. Ind. Bat. I. 65 ; *Phanera rufa*, Bth. in Pl. Jungh. 263, in adn. ? ; *B. racemosa*, Vhl. Symb. III. 56. t. 62, non Lamk. ; Roxb. Fl. Ind. II. 325).

HAB. Tenasserim, near Moulmein (J. Anderson, 1866).

17. B. ROSEA. Kurz in Journ. As. Soc. Beng. 1873, 72.

HAB. Martaban, in the eng-forests of Kaymapyoo choung (Dr. Brandis).—Fl. May.

18. B. FERRUGINEA, Roxb. Fl. Ind. 331; Korth in Nat. Verh. Bot. 93. t. 23 (*Phanera ferruginea*, Bth. in Pl. Jungh. 262, in adn.; Miq. Fl. Ind. Bat. I. 62; *Phanera excelsa*, Bl. ap. Miq. l. c.; *Phanera albolutea*, Miq. Suppl. Fl. Sum. 285; *Phanera Griffithiana*, Bth. in Pl. Jungh. 263, in adn.).

HAB. Tropical forests of the Martaban Hills, east of Tounghoo, at 2000 to 3000 feet elevation.

19. B. ANGUINA, Roxb. Corom. Pl. III. t. 285 and Fl. Ind. II. 728. —(*Lasiobema anguinum*, Korth. in Verh. Nat. Gesch. 84; Miq. Fl. Ind. Bat. I. 71; *Lasiobema Horsfieldii*, Miq. l. c.).

HAB. Not unfrequent in the tropical forests of Martaban, east of Tounghoo; also Chittagong.—Fl. RS.

Cynometra, L.

Conspectus of Species.

× Racemes short and umbel-like, puberulous.

Leaves and rachis glabrous; leaflets larger, usually in a single pair; $1\frac{1}{2}$ —2 in. long, edible, *C. ramiflora*.

Rachis of leaves puberulous, slenderer; leaflets smaller, usually in 2, very rarely in 3 pairs; pods about $\frac{1}{2}$ in. long, insipid, *C. bijuga*.

× × Racemes longer or shorter, bracted.

Pedicels glabrous or puberulous; leaflets in a single pair, *C. cauliflora*.

1. C. RAMIFLORA, L. sp. pl. 547; Miq. Fl. Ind. Bat. I. 78; Bth. Fl. Austr. II. 296.

HAB. Rarely planted in villages of Tenasserim.

2. C. BIJUGA, Spanoghe in Miq. Fl. Ind. Bat. I. 78.

HAB. Frequent in the tidal and the beach-forests along the coasts, from Arracan down to Tenasserim and the Andamans.—Fl. Octob.; Fr. CS.

3. C. CAULIFLORA, L. sp. pl. 547; Miq. Fl. Ind. Bat. I. 77?

HAB. Burma, planted (according to the Revd. F. Mason).

Sindora, Lq.

1. S. SIAMENSIS, Teyism. in Miq. Ann. Mus. Lugd. Bat. III. 86. (*S. Wallichii*, Bth. in Hook. Icon. t. 1017—18).

HAB. Adjoining Siamese provinces.—Fl. Begin of RS.; Fr. HS.

Pahudia, Miq.

Conspectus of Species.

Leaflets in 5 pairs, thin coriaceous, rounded or apiculate, the rachis and petiolules stout; sepals about 3 lin. long, *P. Javanica*.

Leaflets in 2 pairs, blunt or emarginate, thin chartaceous, glaucescent beneath, the rachis and petiolules very slender; sepals 2 lin. long; pods woody, 3—4 in. long, very thick and plump, *P. xylocarpa*.

1. *P. XYLOCARPA*, Kurz MS.

HAB. Adjoining provinces of Siam (Teysmann).

P. Hasskarlii, Miq., has also only two pairs of leaflets, but Hasskarl's description of *Jonesia monopetala* (Retzia I. 199), and more especially of the pod, clearly points to *Macrolobium*.

Afzelia, Sm.

Conspectus of Species.

Inflorescence and calyx puberulous; pods $\frac{1}{2}$ —1 foot long, woody; leaflets usually blun-
tish, *A. bijuga*.

Inflorescence and calyx glabrous; pods 3—4 in. long, thin coriaceous; leaflets notched,
..... *A. retusa*.

1. *A. BIJUGA*, A. Gray Unit. Stat. Expl. 467. t. 51; Walp. Ann. IV. 594.—(*Macrolobium bijugum*, Colebr. in. Linn. Trans. XII. t. 19; *Jonesia triandra*, Roxb. Fl. Ind. II. 220).

HAB. Not unfrequent in the coast-forests and beach-jungles of the Andamans.—Fl. May, June; Fr. Apr.

2. *A. RETUSA*, Kurz in Journ. As. Soc. Beng. 1873, 73.

HAB. Not unfrequent in the tidal forests along the coasts of the Andaman islands.—Fl. May.

Tamarindus, L.

*1. *T. INDICA*, L. sp. pl. 48; Roxb. Fl. Ind. III. 215; Heyne Arznei Gew. t. 221; Miq. Fl. Ind. Bat. I. 82; Bedd. Fl. Sylv. t. 184. (*T. officinalis*, Hook. Bot. Mag. t. 4563).

HAB. Generally cultivated in villages all over Burma, more especially in the drier parts, but apparently nowhere wild.—Fl. HS.; Fr. CS.

Amherstia, Wall.

1. *A. NOBILIS*, Wall. Pl. As. rar. I. t. 1 and 2; Miq. Fl. Ind. Bat. I. 87; Bot. Mag. t. 4453.

HAB. Planted around kyouks, chiefly in the southern parts of Burma; wild along streams in Martaban (Parish); Tenasserim.—Fl. Jan.—Apr.

Saraca, L.

1. *S. INDICA*, L. Mant. 98; Miq. Fl. Ind. Bat. I. 83; Bedd. Fl. Sylv. t. 57. (*Jonesia Asoca*, Roxb. Fl. Ind. II. 218; Bot. Mag. t. 3018; Wight Icon. t. 206; *Jonesia Zollingeriana*, Miq. l. c. 84).

HAB. Wild in the tropical forests of Arracan (Boronga Island, at 1000 feet elevation); also Tenasserim; much planted around monasteries all over the country.—Fl. Octob.

Poinciana, L.*Conspectus of Species.*

Calyx greyish velvety ; petals crispate-fimbriate, yellow, *P. elata*.

Calyx quite glabrous ; petals very large, waved, usually crimson or orange-crimson,
..... *P. regia*.

*1. *P. REGIA*, Boj. in Bot. Mag. t. 2884.

HAB. Frequently cultivated in the European stations all over Pegu.
—Fl. H. and RS. ; Fr. R. and CS.

Parkinsonia, L.

*1. *P. ACULEATA*, L. Hort. Cliff. 157. t. 13 ; WA. Prod. I. 283 ;
Griff. Not. Dicot. 447.

HAB. Frequently planted in Ava and Prome, and in the last-named
district often like wild in woods and neglected lands.—Fl. nearly ∞ .

Cæsalpinia, L.*Conspectus of Species.*

Subg. I. Cæsalpinaria. Albumen none. Pods coriaceous, 2-valved.
Filaments very long and slender, quite glabrous. Erect shrubs or trees,
unarmed.

A glabrous shrub, the branchlets more or less pruinous, *C. pulcherrima*.

Subg. II. Eu-Cæsalpinia. Seeds albuminous. Pods various. Fila-
ments as long as, or somewhat longer than, the petals. Usually scandent
shrubs more or less armed with prickles.

A. Valves of pod dry, coriaceous or almost chartaceous.

Trib. 1. Nugaria, DC.—Scandent thorny shrubs, rarely trees. Pods rigidly or
thinly coriaceous, 2-valved or indehiscent, smooth. Seeds compressed or not. Stamens
as long as, or a little longer than, the petals.

* *Seeds flat and compressed. Pods 2-valved. Leaflets large.*

All parts quite glabrous, *C. nuga*.

* * *Seeds hardly compressed. Pods 2-valved or indehiscent or nearly so, the
sutures usually thickened. Leaflets small.*

Small tree ; leaflets unequally oblong, retuse ; pods tardily dehiscing, *C. sappan*.

Scandent shrubs ; leaflets ovate, acute ; pods 2-valved, *C. sepiaria*.

Trib. 2. Guilandina, L.—Scandent thorny shrubs. Pods coriaceous or thin coria-
ceous, 2-valved, the valves echinate or glandular-hirsute. Seeds not compressed.
Stamens as long as, or somewhat longer than, the petals.

* *Pods echinate. Seeds almost globose.*

Branchlets etc. more or less brown or tawny-pubescent ; stipules large, cut into large
segments ; bracts at apex spreading or reflexed, *B. Bonducella*.

As preceding, but leaves more glabrescent ; stipules none ; bracts straight and erect,
..... *C. Bondhuc*.

* * *Pods glandular-hirsute when fully ripe. Seeds oblong.*

All parts more or less glandular-puberulous and prickly, *C. mimosoides*.

B. Pods fleshy-coriaceous, torose.

Trib. 3. Cinclidocarpus, Zoll.—Thorny scandent shrubs. Pods indehiscent, the sutures thickened. Seeds not compressed. Stamens as long as, or somewhat longer than, the petals.

Panicle shortly tomentose and prickly, *C. tortuosa*.
Panicle glabrous and unarmed, *C. digyna*.

*1. *C. PULCHERRIMA*, Sw. Obs. 165; Miq. Fl. Ind. Bat. I. 112. (*Poinciana pulcherrima*, L. sp. pl. 554; DC. Prod. II. 484; Roxb. Fl. Ind. II. 355; Bot. Mag. t. 995).

HAB. Generally cultivated in villages, especially around monasteries etc., all over the country.—Fl. Fr. ∞ .

2. *C. NUGA*, Ait. Hort. Kew III. 32; DC. Prod. II. 481; Miq. Fl. Ind. Bat. I. 108.—(*C. paniculata*, Roxb. Fl. Ind. II. 364; Wight Icon. t. 36; Griff. Not. Dicot. 446; *C. Chinensis*, Roxb. l. c. 361).

HAB. Rather frequent along the coasts, especially in the beach-forests, from Arracan down to Tenasserim and the Andamans.—Fl. May—Octob.

3. *C. SAPPAN*, L. sp. pl. 544; Roxb. Corom. Pl. I. t. 16; Miq. Fl. Ind. Bat. I. 101.

HAB. Frequent in the Tenasserim Provinces; Pegu, Rangoon (Wall).—Fl. Aug.

4. *C. SEPIARIA*, Roxb. Fl. Ind. II. 360; Miq. Fl. Ind. Bat. I. 109; Wight Icon. t. 37.—(*Reichardia? decapetalum*, Roth. Nov. Spec. 210; DC. Prod. II. 484).

HAB. Burma (according to the Revd. F. Mason).

5. *C. BONDHUC*, Roxb. Fl. Ind. II. 362. (*Guilandina Bondhuc*, L. sp. pl. 545; Miq. Fl. Ind. Bat. I. 113).

HAB. Not unfrequent in the leaf-shedding forests of Burma, from Prome and Martaban down to Tenasserim and the Andamans.—Fl. RS.; Fr. ∞ .

6. *C. MIMOSOIDES*, Lamk. Encycl. Meth. I. 457 and II. t. 335. f. 2; WA. Prod. I. 281; Wight Icon. t. 392.—(*C. Simora*, Ham. in Roxb. Fl. Ind. 359).

HAB. Frequent in the low forests of the Sittang zone of Pegu, especially about Tounghoo.—Fl. Fr. March, Apr.

7. *C. TORTUOSA*, Roxb. Fl. Ind. II. 365; Miq. Fl. Ind. Bat. I. 109. (*C. acanthobotrya*, Miq. Suppl. Fl. Fl. Sum. 108 and 293).

HAB. Tenasserim, Tavoy (Wall. Cat. 5827. C).—Fl. Octob.

8. *C. DIGYNA*, Roth. in Nov. Act. Nat. Cur. Berol. 1803. 198. t. 3; WA. Prod. I. 281.—(*C. oleosperma*, Roxb. Fl. Ind. II. 357; *C. gracilis*, Miq. in. Fl. Ind. Bat. I. 110).

HAB. Frequent along choungs in the open forests, but more so in shrubberies around villages, all over Burma, from Ava and Martaban down to Tenasserim.—Fl. Jul.—Octob.; Fr. Jan.—Apr.

Pterolobium, R.Br.

1. *P. MACROPTERUM*, Kurz in Journ. As. Soc. Beng. 1873, 71.

HAB. Frequent in the mixed forests, from Pegu and Martaban down to Tenasserim.—Fr. Jan.

Mezoneurum, Desf.*Conspectus of Species.*

Leaflets in 10 to 8 pairs, $\frac{1}{2}$ in long, blunt or retuse, *M. glabrum*.

Leaflets in 3—4 pairs, $1\frac{1}{2}$ —2 in. long, bluntish acuminate, *M. cucullatum*.

1. *M. GLABRUM*, Desf. Mém. Mus. IV. 245. t. 10; Miq. Fl. Ind. Bat. I. 103.

Var. *a. GENUINUM*, glabrous or nearly so; leaflets usually alternate.

Var. *β. ENNEAPHYLLUM* (*M. enneaphyllum*, WA. Prod. I. 283, in adn.; Miq. Fl. Ind. Bat. I. 104. t. 2; *Cæsalpinia enneaphylla*, Roxb. Fl. Ind. II. 363), glabrous or the secondary rachises and young shoots slightly puberulous; leaflets glabrous or nearly so, usually opposite.

Var. *γ. PUBESCENS* (*M. pubescens*, Desf. in Mém. Mus. IV. 245. t. 2; Miq. Fl. Ind. Bat. I. 104), the young parts more or less velvety pubescent or puberulous; leaflets opposite or nearly so, at least beneath more or less shortly pubescent.

HAB. Var. *β.* frequent in the lower and upper mixed forests, more especially around villages and along shrubby banks of rivers, in the Irrawaddi zone of Pegu; var. *γ.* not unfrequent in the dry forests of the Prome district.—Fr. CS.

2. *M. CUCULLATUM*, WA. Prod. I. 283. (*Cæsalpinia cucullata*, Roxb. Fl. Ind. II. 358; *M. macrophyllum*, Bl. ap. Miq. Fl. Ind. Bat. I. 104).

HAB. Frequent in the mixed and the dry forests, all over Burma, from Ava and Chittagong to Pegu and Martaban.—Fl. Febr. March; Fr. Nov.

Peltophorum, Vog.*Conspectus of Species.*

Pedicels only 2—3 lin. long; pods with coriaceous wings, *P. ferrugineum*.

Pedicels 1— $1\frac{1}{2}$ in. long; pods with thin chartaceous wings, *P. dasyrachis*.

1. *P. FERRUGINEUM*, Bth. in Fl. Austr. II. 279. (*Cæsalpinia ferruginea*, Dene. in Nouv. Ann. d. Mus. II. 462; Miq. Fl. Ind. Bat. I. 111).

HAB. Not unfrequent in the coast-forests, chiefly the beach-forests, of the Andaman islands.—Fl. May.

Acrocarpus, Wight.*Conspectus of Species.*

Flowers dirty purple or brown, small; petals 2 lin. long or somewhat longer; pods

8—12-seeded, *A. grandis*.

Flowers green, twice the size ; petals 3 lin. long or longer ; pods 17—18-seeded,

.. *A. fraxinifolius*.

1. *A. FRAXINIFOLIUS*, Wight Icon. t. 254 ; Bedd. Fl. Sylv. t. 44.

HAB. Frequent in the tropical forests of the Pegu Yomah.—Fl. Jan. Febr. ; Fr. Apr. May.

Adenanthera, L.

1. *A. PAVONINA*, L. sp. pl. 550 ; Roxb. Fl. Ind. II. 370 ; Wight Ill. t. 80 ; Miq. Fl. Ind. Bat. I. 46 ; Bth. in Linn. Trans. XXX. 375 ; Bedd. Fl. Sylv. t. 46.—(*Entada arborea*, Griff. Not. Dicot. 452 ; *A. Gersenii*, Scheffer in Nat. Tydsch. Ned. Ind. 1868. 16 ?).

Var. α . *GENUINA*, seeds about $\frac{1}{8}$ in. in diameter.

Var. β . *MICROSPERMA* (*A. microsperma*, T. and B. in Nat. Tydsch. v. Ned. Ind. XXVII. 58 ; Bth. in Linn. Trans. XXX. 375), seeds half the size.

HAB. Var. β . frequent in the tropical and moister upper mixed forests, all over Burma and the adjacent islands, up to 3000 feet elevation. Fl. Apr. May ; Fr. CS.

Entada, Adams.

1. *E. SCANDENS*, Bth. in Hook. Journ. Bot. IV. 332 and Linn. Trans. XXX. 363.—(*Mimosa scandens*, L. sp. pl. 1501 ; Roxb. Fl. Ind. II. 554 ; *E. Purshaeta*, DC. Prod. II. 425 ; Miq. Fl. Ind. Bat. I. 45 ; Scheff. in Nat. Tydsch. Ned. Ind. XXXII. 90. t. 16 and 18 A ; *Entada* sp., Griff. Not. Dicot. 452 ; *E. Rumphii*, Scheff. in Nat. Tydschr. Ned. Ind. XXXII. t. 17. and 18. B.).

HAB. Frequent in all mixed forests, all over Burma and the adjacent islands.—Fl. March, Apr. ; Fr. CS.

Neptunia, Lour.

1. *N. OLERACEA*, Lour. Fl. Cochinch. II. 840 ; Miq. Fl. Ind. Bat. I. 50 ; Bth. in Linn. Trans. XXX. 383.—(*Desmanthus natans*, Willd. sp. pl. IV. 1014 ; Griff. Not. Dicot. 453 ; *Mimosa natans*, Roxb. Corom. Pl. II. t. 119 and Fl. Ind. II. 553 ; *N. plena*, Ldl. Bot. Neg. t. 3, non Bth.).

HAB. Not unfrequent in stagnant waters and swamps of the alluvial plains of Pegu, Martaban, and Tenasserim.—Fl. RS. ; Fr. CS.

Mimosa, L.

1. *M. PUDICA*, L. sp. pl. 1501 ; Bth. in Hook. Journ. Bot. IV. 367 ; and in Linn. Trans. XXX. 397 ; Miq. Fl. Ind. Bat. I. 43.

HAB. An introduced weed, but now very common on dry grassy places, along road-sides, etc., of the more cultivated parts of Pegu, especially around Rangoon ; also in Martaban, Ava, etc.—Fl. RS. ; Fr. Sept.

Xylia, Bth.

1. **X. DOLABRIFORMIS**, Bth. in Hook. Journ. Bot. IV. 417; and in Linn. Trans. XXX. 373; Bedd. Fl. Sylv. t. 186; Miq. Fl. Ind. Bat. I. 42. —(*Mimosa xylocarpa*, Roxb. Corom. Pl. I. t. 100 and Fl. Ind. II. 543).

HAB. Common in the mixed and dry forests, all over Burma and the adjacent provinces, up to 3000 feet elevation.—Fl. March, Apr.; Fr. CS.

Parkia, RBr.*Conspectus of Species.*

* *Calyx-lobes obovate-cuneate.*

Leaflets an inch long, pubescent beneath, penninerved; receptacle regular, ... *P. insignis*.

* * *Calyx-lobes short, rotundate (not cuneate-narrowed.)*

Leaflets $\frac{1}{2}$ in. long, quite glabrous, 1-nerved with a lateral basal nerve; receptacle irregular, *P. leiophylla*.

Leaflets $\frac{1}{2}$ — $\frac{1}{3}$ in. long, very narrow, sparingly pubescent beneath, 1-nerved without lateral nerves; receptacle regular, *P. Roxburghii*.

1. **P. INSIGNIS**, Kurz. in Journ. As. Soc. Beng. 1873, 74; Bth. in Linn. Trans. XXX. 361.

HAB. Not unfrequent in the tropical forests of Martaban, east of Tounghoo.—Fl. Apr. May.

2. **P. LEIOPHYLLA**, Kurz in Journ. As. Soc. Beng. 1873, 73; Bth. in Linn. Trans. XXX. 361.

HAB. Frequent in the tropical forests of the Pegu Yomah, especially along its eastern slopes.—Fl. HS. ?; Fr. Febr. March.

Acacia, Willd.*Conspectus of Species.*

* *Trees or erect shrubs, the branchlets armed only with paired diverging stipulary or infra-stipulary prickles.*

× Flowers in spikes.

+ Pod-valves chartaceous, transversely reticulate-veined, the sutures nerve-like or almost keeled.

Glaucous-green, glabrous; leaflets oblong-linear, blunt, 3—5 lin. long; flowers yellow, *A. ferruginea*.

+ + Pod-valves coriaceous, the margins not or hardly prominent.

Spikes glabrous or pubescent, yellow; leaves glabrous or slightly pubescent; bark much cracked and rough, dark brown, *A. Catechu*.

Spikes tomentose, white; leaves while young greyish pubescent; bark rather even and smooth, white, *A. Suma*.

× × Flowers in globular heads, yellow.

+ Pods dry-coriaceous, flat, dehiscent.

Bark whitish; flower-heads arranged in ample terminal panicles, *A. leucophloea*.

+ + Pod thick, torose, fleshy-coriaceous, indehiscent.

Glabrous or nearly so; leaves $1\frac{1}{2}$ —3 in. long, leaflets 2—3 lin. long, *A. Farnesiana*.

* * Woody climbers, without stipulary spines, but the branchlets armed along their whole length with sharp recurved prickles. Flower-heads globular.

× Pods fleshy-coriaceous, often somewhat constricted between the seeds.

Leaflets in 10—20 pairs, up to $\frac{1}{2}$ in. long; flower-heads small, yellowish, *A. rugata*.

× Pods dry, chartaceous or thin coriaceous, flat.

O Ovary and pods pubescent.

Leaflets in 15—40 pairs, 3—6 lin. long; flower-heads small, white, in panicles,

... *A. caesia*.

O O Ovary and pods glabrous.

Leaflets in 8—20 pairs, $\frac{1}{2}$ in. long; peduncles tawny tomentose, *A. Intsia*.

Leaflets in 30—40 pairs, 2—3 lin. long; flower-heads the size of a large pea; panicles

and young branchlets puberulous or tomentose, not pruinous, *A. pennata*

As preceding, but branchlets and panicles pruinous; leaflets up to $\frac{1}{2}$ in. long; flower-

heads twice the size, *A. pruinescens*.

1. A. FERRUGINEA, DC. II. 458; Bth. in Hook. Lond. Journ. Bot. I. 508. and in Linn. Trans. XXX. 518; WA. Prod. I. 273; Bedd. Fl. Sylv. t. 51.—(*Mimosa ferruginea*, Roxb. Fl. Ind. II. 561).

HAB. Burma (according to Beddome).

2. A. CATECHU, Willd. sp. pl. IV. 1079; Miq. Fl. Ind. Bat. I. 9; Bth. in Linn. Trans. XXX. 519. (*Mimosa Catechu*, L. f. Suppl. 495; Roxb. Fl. Ind. II. 563 and Corom. Pl. II. 40. t. 174).

Var. *a.* GENUINA (*A. catechuoides*, Bth. in Hook. Lond. Journ. I. 510; *Mimosa catechuoides*, Roxb. Corom. Pl. II. t. 175 and Fl. Ind. II. 562), young parts all slightly appressed pubescent but soon glabrescent; full-grown leaves glabrous or the leaflets ciliate, the rachis slightly pubescent; spikes shorter and thicker, like the calyces more or less appressed pubescent; corolla about twice the length of the calyx.

Var. *β.* SUNDRA (*A. Sundra*, DC. Prod. II. 458; Bth. in Hook. Lond. Journ. I. 510; *Mimosa Sundra*, Roxb. Corom. Pl. III. t. 225 and Fl. Ind. II. 562; Bedd. Fl. Sylv. t. 50), all parts glabrous or the very young shoots slightly pubescent; full-grown leaves and rachis quite glabrous; spikes elongate and slender, quite glabrous; corolla glabrous, about $\frac{2}{3}$ longer than the glabrous calyx.

HAB. Var. *a.* common in the dry forests, rarely in the lower mixed and savannah forests of Ava and Prome, extending into the Irrawaddi zone of Pegu; var. *β.* apparently in Ava.—Fl. Begin of RS; Fr. CS.

3. A. SUMA, Buch. in Voigt Hort. Calc. 260; Brand. For. Fl. 187; Bth. in Linn. Trans. XXX. 519.—(*Mimosa Suma*, Roxb. Fl. Ind. II. 563; *A. Catechu*, Bth. in Hook. Lond.; Journ. Bot. I. 510, non Willd.; Bedd. Fl. Sylv. t. 49).

HAB. Ava?

4. A. LEUCOPHLOEA, Willd. sp. pl. IV. 1063; Bth. in Hook. Lond. Journ. Bot. I. 103 and in Linn. Proc. XXX. 513; Miq. Fl. Ind. Bat. I.

9; Brand. For. Fl. t. 27; Bedd. Fl. Sylv. t. 48 (*Mimosa leucophloea*, Roxb. Corom. Pl. II. 27. t. 150).

Var. α . GENUINA, flower-heads the size of a pea, the stout peduncles, and also the pods, shortly tomentose; leaves slightly, the rachis more or less, pubescent.

Var. β . MICROCEPHALA (*A. microcephala*, Grah. in Wall. Cat. 5263), flower-heads half the size, the slender peduncles and the inflorescence puberulous; pods when fully ripe quite glabrous; leaves and their rachis glabrous.

HAB. Var. α . Ava, along the Irrawaddi (Wall. Cat. 5262); var. β . not unfrequent in the dry forests of the Prome district, up to 1000 feet elevation.—Fr. March.

The two varieties here adopted are very likely different species.

*5. A. FARNESIANA, Willd. sp. pl. IV. 1083; Bth. in Hook. Lond. Journ. Bot. I. 494 and in Linn. Trans. XXX. 502; Bedd. Fl. Sylv. t. 52. (*Vachellia Farnesiana*, WA. Prod. I. 272; Wight Icon. t. 300).

HAB. Frequently planted in villages all over Burma, more especially in Ava and Prome, where it is often found half-spontaneous.—Fl. Jan.

6. A. RUGATA, Ham. Wall. Cat. 5251; Bth in Hook. Lond. Journ. Bot. I. 514; *Mimosa rugata*, Lamk. Diet. I. 20. (1786).

Var. α . GENUINA, ovary villous; softer parts more pubescent.

Var. β . CONCINNA (*A. concinna*, DC. Prod. II. 464; Bth in Hook. Lond. Journ. Bot. I. 514 and in Linn. Trans. XXX. 531; *Mimosa concinna*, Willd. sp. pl. (1805) IV. 1039; Roxb. Fl. Ind. II. 565), ovary glabrous or nearly so; all softer parts more glabrous.

HAB. Var. β . frequent in the tropical and moister upper mixed forests, all over Burma down to Tenasserim and the Andamans.—Fl. March, Apr.; Fr. CS.

7. A. CÆSIA, Willd. sp. pl. IV. 1090; WA. Prod. I. 278; Bth. in Hook. Lond. Journ. Bot. I. 515 and in Linn. Trans. XXX. 530 in part. (*Mimosa caesia*, L. sp. pl. 1507, non Roxb.; *Mimosa torta*, Roxb. Fl. Ind. II. 566).

Var. α . GENUINA, leaflets only about 3 lin. long, more rigid, blun-tish with or without a mucro; branches terete.

Var. β . ELEGANS, leaflets about $\frac{1}{2}$ in. long, bristly acute, less rigid; branches 5-angular, retorsely prickly along the corners.

HAB. Var. β . not unfrequent in the tropical forests of the eastern slopes of the Pegu Yomah and in Martaban.—Fr. CS.

8. A. INTSIA, Willd. sp. pl. IV. 1091; Bth. in Hook. Lond. Journ. Bot. I. 515; Miq. Fl. Ind. Bat. I. 11. (*Mimosa Intsia*, L. sp. pl. 1508; Roxb. Fl. Ind. II. 565; *A. oxyphylla*, Grah. in Wall. Cat. 5252; Bth. l. c. 514; *Mimosa caesia*, Roxb. Fl. Ind. II. 565 ?).

HAB. Chittagong Hills; Ava, Khakyen Hills, east of Bhamo.

9. *A. PENNATA*, Willd. sp. pl. 1090; Bth. in Hook. Lond. Journ. I. 516, excl. syn. Roxb. and in Linn. Trans. XXX. 531 in part only; Miq. Fl. Ind. Bat. I. 12.—(*Mimosa pennata*, L. sp. pl. 1507; Roxb. Fl. Ind. II. 565; *A. prensans*, Lowe in Bot. Mag. t. 3408).

Var. *a. GENUINA*, panicles puberulous; flower-heads the size of a large pea; young branchlets shortly puberulous; leaflets glabrous; rachis glabrous or slightly pubescent; pods linear-lanceolate, acuminate at both ends.

2. Var. *β. CANESCENS* (*A. canescens*, Grah. in (Wall. Cat. 5256), panicles and young branchlets tomentose; leaflets ciliate; rachis tomentose; pods linear-oblong, rounded at both ends, smooth, pale-coloured.

HAB. Var. *a.* common in all leaf-shedding forests, all over Burma and the adjacent provinces; var. *β.* Ava.—Fr. CS.

The two varieties here adopted offer differences which are rather of specific value.

10. *A. PRUINESCENS*, Kurz MS.

HAB. Not unfrequent in the tropical forests of the southern Pegu Yomah; also Ava, Khakyen Hills, east of Bhamo (J. Anderson).

This species has flower-heads twice the size of those of the preceding; and the branchlets, inflorescence, and peduncles are more or less pruinous, with or without an admixture of tomentum. It is a powerful climber, with somewhat compressed dark-coloured stems up to 3 feet girth. The tough reddish bark and fibre are used for poisoning fish.

Albizzia, Durazz.

Conspectus of Species.

Subg. 1. Eu-Albizzia. Pods straight very flat, the sutures slightly thickened. Flowers white.

* *Pinnae* numerous (10—18); *leaflets* linear, 1—6 *lin. long*, in very numerous *pairs*.

× Leaflets bluntish, the nerve central or nearly so.

Leaflets very narrow, glabrous; flower-heads small, in terminal panicles,

...*A. myriophylla*.

× × Leaflets more or less acute, the nerve marginal or nearly so. Trees.

Stipules very large, obliquely ovate, acuminate; all parts more or less shortly pubescent; corolla nearly 4 times as long as the calyx,*A. stipulata*.

Stipules none or obsolete; full-grown parts glabrous or nearly so,*A. elegans*.

* * *Pinnae* in 2—6 *pairs*; *leaflets* ovate to oblong, $\frac{1}{2}$ — $1\frac{1}{2}$ *in. long*, in several *pairs*.

× Leaflets sessile.

Flowers small; calyx minute; corolla $1\frac{1}{2}$ *lin. long*; pods blackish or brownish black,

...*A. odoratissima*.

Flowers rather conspicuous ; calyx $1\frac{1}{2}$ lin. long ; corolla 4 lin. long ; pods yellowish,
 .. *A. Lebbek*.

× × Leaflets shortly petioluled. Pinnæ in 4—3 pairs.

Leaflets blunt or somewhat acute, $\frac{1}{2}$ —1 in. long, glaucescent beneath ; pods tapering
 at the base, linear, smooth, brown, *A. procera*.

Leaflets very like those of *Cassia Fistula*, usually emarginate-bluntish, $2\frac{1}{2}$ —4 in. long ;
 pods stalked, oblong, veined, black, *A. Teysmanni*.

* * * Pinnæ in a single pair ; leaflets few only, large, acuminate.

Glabrous ; pods broad, very flat, *A. lucida*.

Subg. 2. Pithecolobium, Mart. Pods twisted circinately or screw-like
 or curved. Flowers white.

* Flowers pedicelled, in head-like umbels or racemes. Trees.

+ Branchlets terete.

Leaves with a single pair of pinnæ ; leaflets in 2—3 pairs, smooth and glossy ; seed-
 bearing lobes of pod about an inch long and broad, *A. Jiringa*.

+ + Branchlets sharply angular.

Leaves with about 12 pairs of pinnæ ; leaflets in 4—8 pairs, while young shortly and
 softly pubescent like all younger parts, acuminate, *A. heterophylla*.

* * Flowers sessile, in small heads.

Erect shrub ; leaves with a single pair of pinnæ ; leaflets in 4—8 pairs, almost glabrous,
 glaucous beneath, *A. glomeriflora*.

1. *A. MYRIOPHYLLA*, Bth. in Hook. Lond. Journ. Bot. III. 90 and
 in Linn. Trans. XXX. 567.—(*Mimosa microphylla*, Roxb. Fl. Ind. II. 549,
 non Willd.).

HAB. Tenasserim (Falconer).—Fl. Apr.

2. *A. STIPULATA*, Boiv. Encycl. XIX. siècle. II. 33 ; Bth. in Hook.
 Lond. Journ. Bot. III. 92 and in Linn. Trans. XXX. 568 ; Miq. Fl. Ind.
 Bat. I. 28 ; Bedd. Fl. Sylv. t. 55.—(*Mimosa stipulata*, Roxb. Hort. Beng.
 40 ; *Mimosa stipulacea*, Roxb. Fl. Ind. II. 549 ; *Mimosa Smithiana*, Roxb.
 l. c. 550).

HAB. Frequent in the tropical and moister upper mixed forests,
 ascending into the hill-forests up to 4000 feet elevation, from Chittagong
 and Ava down to Tenasserim and the Andamans.—Fl. Apr. May ; Fr. CS.

3. *A. ELEGANS*, Kurz in Pegu Rep. App. B. 47.

HAB. Not unfrequent in the tropical forests of the eastern slopes of
 the Pegu Yomah, especially along the feeders of the Swa choung, etc.

Very similar to the preceding, but a much more elegant tree ; flowers
 and fruits unknown. I have the very same plant from the island of Banka
 (Sumatra).

4. *A. ODORATISSIMA*, Bth. in Hook. Lond. Journ. Bot. III. 88
 and in Linn. Trans. XXX. 565. ; Bedd. Fl. Sylv. t. 54.—(*Mimosa odora-
 tissima*, Roxb. Corom. Pl. II. 12. t. 120 and Fl. Ind. II. 546 ; *A. micran-
 tha*, Boiv. Encycl. XIX. siècle. II. 33 ; Miq. Fl. Ind. Bat. I. 24).

HAB. Frequent in the mixed and dry forests, all over Prome, Pegu,
 and Martaban down to Tenasserim.—Fl. HS. ; Fr. CS.

5. A. LEBBEK, Bth. in Hook. Lond. Journ. Bot. III. 87 and in Linn. Trans. XXX. 562; Bedd. Fl. Sylv. t. 53 ?—(*Mimosa Lebbek*, L. sp. pl. 1503; *Mimosa Sirissa*, Roxb. Fl. Ind. II. 544; *A. latifolia*, Boiv. Encycl. XIX. siècl. II. 33; Miq. Fl. Ind. Bat. I. 22; *Mimosa speciosa*. Jacq. Icon. rar. I, 19. t. 198).

HAB. Frequent in the tropical and moister upper mixed forests, from Pegu and Martaban down to Tenasserim and the Andamans; a pubescent variety rare along choungs in the Prome district.—Fl. Apr. May; Fr. CS.

6. A. PROCERA, Bth. in Hook. Lond. Journ. Bot. III. 89 and in Linn. Trans. XXX. 564; Miq. Fl. Ind. Bat. I. 21; Brand. For. Fl. t. 26. (*Mimosa procera*, Roxb. Corom. Pl. II. 12. t. 121 and Fl. Ind. II. 548; *Mimosa elata*, Roxb. Fl. Ind. II. 546).

HAB. Frequent in the mixed and the dry forests, entering also the tidal savannahs, all over Prome, Pegu, and Martaban down to Tenasserim.—Fl. May, June; Fr. CS.

7. A. TEYSMANNI, Kurz MS.

HAB. Adjoining Siamese province of Radbooree.—Fr. HS. (ton-sak of the Siamese).

8. A. LUCIDA, Bth. in Hook. Lond. Journ. Bot. III. 86 and in Linn. Trans. XXX. 560; Miq. Fl. Ind. Bat. I. 18.—(*Mimosa lucida*, Roxb. Fl. Ind. II. 544).

HAB. Common in the dry forests of Ava and Prome; rather rare in the lower mixed forests of Pegu.—Fl. Apr.; Fr. CS.

9. A. JIRINGA (*Mimosa Jiringa*, Jack. in Mal. Misc. I. 14; *Mimosa Djiringa* and *Kœringa*, Roxb. Hort. Beng. 40; and Fl. Ind. II. 543; *Pithecolobium lobatum*, Bth. in Hook. Lond. Journ. Bot. III. 208 and in Linn. Trans. XXX. 575; Miq. Fl. Ind. Bat. I. 33).

HAB. Rather frequent in the tropical forests, and along choungs in the moister upper mixed forests, of the Pegu Yomah; and from Martaban down to Tenasserim; also much planted in villages.—Fl. Apr. May; Fr. March. Apr.

10. A. HETEROPHYLLA (*Mimosa heterophylla*, Roxb. Fl. Ind. II. 545; *Pithecolobium angulatum*, Bth. in Hook. Lond. Journ. Bot. III. 208 and in Linn. Trans. XXX. 580; Miq. Fl. Ind. Bat. I. 34; *Pithecolobium acutangulum*, Miq. Suppl. Fl. Sumatr. 282).

HAB. Frequent in the drier hill-forests, also in the pine-forests, from the Martaban Hills down to Tenasserim, at 4000 to 6000 feet elevation.—Fl. March, Apr.; Fr. Apr. May.

11. A. GLOMERIFLORA, Kurz in Journ. As. Soc. Beng. 1873, 74; Bth. in Linn. Trans. XXX. 560.

HAB. Not unfrequent in the drier hill-forests of the Martaban Hills, east of Tonnghoo, at 4000 to 7000 feet elevation.—Fl. March.

Inga, Willd.

*1. *I. DULCIS*, Willd. sp. pl. IV. 1005 ; Wight. Icon. t. 198. (*Mimosa dulcis*, Roxb. Corom. Pl. I. 67. t. 99 and Fl. Ind. II. 556 ; *Pithecolobium dulce*, Bth. in Hook. Lond. Journ. Bot. III. 199 and in Linn. Trans. XXX. 572 ; Miq. Fl. Ind. Bat. I. 40, Bedd. Fl. Sylv. t. 188 ; *Albizzia dulcis*, F. Muell.).

HAB. Only planted in the larger stations where Europeans reside.—Fl. CS. ; Fr. HS.

ROSACEÆ.*Conspectus of Genera.*

A. Carpels solitary or united into a solid 2- or more-celled ovary. Fruit indehiscent.

* *Ovary superior. Fruit a drupe. Calyx or its lobes usually deciduous.*

Trib. 1. Chrysobalanæ. Flowers usually irregular. Style basilar. Ovules 2, ascending. Radicle inferior.

PARINARIUM.—Petals 5 or 4. Stamens perigynous ; filaments filiform ; anthers small. Ovary and drupe 2-celled.

Trib. 2. Prunæ. Flowers regular. Style almost terminal. Ovules 2, suspended. Radicle superior.

PRUNUS.—Calyx 5-lobed. Petals 5, usually conspicuous. Drupe with a bony putamen, straight.

PYGEUM.—Calyx 5—15-toothed. Petals 5—10, minute or none. Drupe often transversely didymous, coriaceous.

* * *Ovary inferior. Fruit an apple or a 1—5-pyrenous drupe.*

*Trib. 3. Pomeæ.**—Ovary-cells 1—5, with 2 ovules in each cell. Leaves simple to lobed and pinnate. Flowers regular.

PIRUS.—Calyx-limb deciduous or persistent. Ovary and apple 2—5-celled, the endocarp often cartilaginous. Leaf-shedding trees or shrubs.

ERIOBOTRYA.—Calyx-limb persistent. Ovary and berry 1—5-celled, the endocarp and septa thin. Evergreen trees.

B. Carpels usually numerous, rarely few, connate or more usually distinct and inserted on a torus or enclosed in the calyx-tube. Fruit-carpels indehiscent, or rarely dehiscent (in *Spireæ*, etc.)

* *Carpels distinct, within the persistent calyx-tube, which forms a compound spuriously inferior fruit.*

Trib. 4. Rosaceæ.—Calyx without bractlets. Petals usually 5. Carpels many, 1-ovuled. Achenes dry, enclosed in the fleshy calyx-tube.

ROSA.—Shrubs, often prickly, with unpaired pinnate leaves and showy flowers.

* * *Carpels distinct, on a conspicuous torus, when ripe forming a superior compound dry or sappy fruit.*

Trib. 5. Rubeæ.—Stamens and carpels numerous. Ovules 2, suspended. Calyx without bractlets.—Shrubs or undershrubs, often prickly, with compound, rarely simple, leaves.

* Decaisne's treatise on this group has not yet reached me.

RUBUS.—Characters of the Tribe.

Trib. 6. Potentilleæ.—Stamens and carpels 4 or more, the latter with a solitary ovule; style usually ventral, marcescent or caducous. Calyx usually with bractlets. Unarmed herbs or undershrubs, with compound or simple leaves.

FRAGARIA.—Calyx with 5 bractlets. Stamens numerous. Ripe carpels crustaceous, seated on a fleshy sappy torus; styles ventral. Herbs with 3-foliate leaves.

POTENTILLA.—Calyx with 4 or 5 bractlets; torus in fruit dry, rest as in preceding. Herbs or undershrubs with variously compound leaves.

Parinarium, Juss.

1. P. SUMATRANUM, Bth. in Fl. Nigrit. 334; Miq. Fl. Ind. Bat. I. 1. 353.—(*Pterocarya Sumatrana*, W. Jack in Maccl. Calc. Journ. IV. 165).

HAB. Burma, without locality, probably Upper Tenasserim (Brandis); frequent in the adjoining provinces of Siam, where the fruit is called 'makloke.'

Prunus, L.

Conspectus of Species.

* *Leaf-shedding trees or shrubs. Flowers appearing before or along with the young foliage. Vernation of leaves conduplicate or convolute.*

Subg. 1. Amygdalus, L.—(*Armeniaca, Juss.*) Flowers solitary or clustered. Drupes densely velvety or tomentose.

Leaves narrow, 2-glandular at the base; stone wrinkled, *P. Persica*.

Subg. 2. Prunus.—Flowers solitary, fascicled or racemose. Drupes glabrous.

* *Drupes usually pruinous. Vernation of leaves convolute.*

Glabrous; flowers rather small, usually by threes; petals $\frac{1}{3}$ in. long; calyx-tube 1—1 $\frac{1}{2}$ lin. long, lobes usually somewhat longer, *P. triflora*.

Almost glabrous; flowers rather large, by 2 or 3 from bracted buds; petals nearly $\frac{1}{2}$ in. long; calyx-tube 3 $\frac{1}{2}$ lin. long, the lobes nearly as long, *P. Puddum*.

* * *Drupes smooth, not pruinous. Vernation of leaves conduplicate.* (*Cerasus, Juss.*)

* * *Evergreen trees. Flowers racemose.* (*Pygeopsis*).

Drupes an in. long; lateral nerves very faint or almost obsolete, *P. Martabanica*.

Drupes $\frac{1}{2}$ in. long; lateral nerves thin but prominent, anastomosing along the margins, *P. Javanica*.

*1. P. PERSICA, Brand. For. Fl. 191. (*Persica vulgaris*, Mill. Dict. No. 1; DC. Prod. II. 531; Spach Suit. t. 5; Boiss. Fl. Orient. II. 640; *Amygdalus Persica*, L. sp. pl. 677; Heyne Arznei Gew. IV. t. 38; Bot. Reg. t. 1586; Journ. Hort. Soc. Lond. III. t. 313; Houtte Fl. d. serr. X. t. 969. XIII. t. 1299. 1300 and 1319; Roxb. Fl. Ind. II. 500).

HAB. Much cultivated in Ava, as for example in the Khakyen Hills and about Bhamo.—Fl. Febr. March; Fr. June, July.

2. P. TRIFLORA, Roxb. Hort. Beng. 38 and Fl. Ind. II. 501, "trifolia" errone typogr.—(*Cerasus triflora*, Lindl. in Wall. Cat. 720).

HAB. Ava, Khakhyen Hills (J. Anderson).—Fl. Octob., Nov.

NB. There is a leaf-specimen of another *Prunus* from the Khakhyen hills in HBC. which differs from *P. pseudo-cerasus*, Ldl., only very slightly in the smaller size and in the serrature of its leaves.

3. *P. PUDDUM*, Roxb. ap. Voigt Cat. Hort. Calc. 200 (*Cerasus Puddum*, Wall. Pl. As. rar. II. t. 146; DC. Prod. II. 537; *P. sylvatica*, Roxb. Fl. Ind. II. 501).

HAB. Ava, Khakhyen Hills.

4. *P. MARTABANICA*, Kurz in And. Rep. ed. 2. 37. (*Cerasus Martabanica*, Wall. Cat. 4902).

HAB. Rather frequent in the tropical forests of the Andamans; Tenasserim.—Fr. May.

Pygeum, Gærtn.

Conspectus of Species.

* *Ovary tawny villous.*

Leaves beneath more or less tawny villous, *P. arboreum*.

* * *Ovary glabrous or sparingly hirsute.*

Glabrous; nerves and veins conspicuous and deeply immersed so as to render the surface of the leaves almost wrinkled, *P. acuminatum*.

Young branchlets, petioles, and nerves beneath pubescent; nerves and veins thin, little visible, *P. persimile*.

1. *P. ARBOREUM*, Endl. Gen. plant. 1250 in part. (*P. parviflorum*, T. and B. in Nat. Tydsch. Neerl. Ind. II. 309; Miq. Fl. Ind. Bat. I/1, 361; *Polydonta arborea*, Bl. Bydr. 1105 in part).

HAB. Tenasserim (Helfer 2053); Taipo mountains, at 4000 feet elevation (Dr. Brandis).

2. *P. ACUMINATUM*, Colebr. in Trans. Linn. Soc. XII. 360. t. 18, non Wight Icon.; Miq. Fl. Ind. Bat. 1/1. 162).

HAB. Chittagong (Hf. and T. Th.).

3. *P. PERSIMILE*, Kurz in Journ. As. Soc. Beng. 1872, 306.

HAB. Tenasserim (Helfer 2056).

Allied to *P. latifolium*; general appearance exactly that of *P. Lampongum*, Miq.

The genus *Pygeum* is so closely allied to the section *Pygeopsis* of *Prunus* with evergreen foliage as to make it difficult to keep it distinct. Indeed, *Pygeum* and *Pygeopsis*, combined, stand pretty much in the same relation to *Prunus* as *Eriobotrya* does to *Pirus*.

Pirus, L.

Conspectus of Species.

* *Flowers usually by pairs from the axils of the leaves, or spuriously racemose from the non-developement of young foliage. Ovary-cells many-ovuled. (Cydonia, Tourn.)*

Young parts, pedicels, and calyx densely white-woolly ; petals an inch long ; fruits pear-shaped, 1—1½ in. long, crowned by the calyx-limb, *P. Indica*.

* * Flowers corymbose or panicled at the end of the branchlets or in the axils of the upper leaves. Ovary-cells 2-ovuled.

Flowers corymbose, on slender pedicels 1—2 in. long ; fruits globose, the size of a bullet, *P. Pashia*.

Flowers panicled, very shortly and stoutly pedicelled ; fruits as in preceding,

.. *P. granulosa*.

1. *P. INDICA*, Roxb. Fl. Ind. II. 511 ; Wall. Pl. As. rar. II. t. 173. (*Cydonia Indica*, Spach Hist. nat. veg. II. 158 ; Wenzig in Linnæa 1874. 12).

HAB, Ava. Taong dong (Wall). ; Ponsee, Khakhyen Hills (J. Anderson).—Fl. March ; Fr. Sept.

2. *P. PASHIA*, Don. Fl. Nep. 236 ; Wenzig in Linn. 1874. 48. (*P. variolosa*, Wall. Cat. 680 ; G. Don. Dichlam. Pl. II. 622).

HAB. Ava. Khakhyen Hills, east of Bhamo (J. Anderson).—Fl. March ; Fr. Aug.

3. *P. GRANULOSA*, Bertol. in. Mem. d'Accad. d. sc. d. istit. d. Bologna Ser. 2. IV. 10. t. 3. sub nom. *P. granulata*.—(*P. Karensium*, Kurz in Journ. As. Soc. Beng. 1872. 306).

HAB. Not unfrequent in the drier hill-forests, especially the stunted ones, of the Martaban Hills, east of Tounghoo, at about 7000 feet elevation. Fr. March. Apr.

Eriobotrya, Ldl.

(*Photinia*, Ldl.)

Conspectus of Species.

× Leaves entire.

Calyx and panicle puberulous ; berries the size of a pea, *E. integrifolia*.

Quite glabrous ; fruit an apple of the size of a bullet, *E. macrocarpa*.

× × Leaves coarsely crenate, at least towards the apex ; inflorescence rusty or tawny woolly-tomentose.

Leaves glabrous ; calyx about a line long, *E. dubia*.

Leaves woolly-tomentose beneath ; calyx 3—4 lin. long, *E. Japonica*.

1. *E. INTEGRIFOLIA* (*Photinia integrifolia*, Ldl. in Trans. Linn. Soc. XIII. 103 ; Bot. Reg. t. 1956 ; DC. Prod. II. 631 ; Wenzig in Linn. 1874. 88 ; *Photinia Notoniana*, WA. Prod. I. 302 ; Wight Icon. t. 991 and Spicil. Neilgh. t. 64, Illustr. Ind. pl. t. 86 ; Bedd. Fl. Sylv. t. 192. ; *Photinia eugenifolia*, Lindl. Bot. Reg. t. 1956).

HAB. Frequent in the stunted forests of the Nattoung mountains in Martaban, east of Tounghoo, at an elevation above 7000 feet.—Fr. March, Apr.

2. *E. MACROCARPA*, Kurz in Journ. As. Soc. Beng. 1872. 306.

HAB. Rare in the tropical forests on the Kambala toung of the Pegu Yomah, at about 2000 feet elevation.—Fr. March, Apr.

The fruits look more like apples, but the tree is evergreen. The very same tree occurs also in the outer hills of the Sikkim Himalaya.

3. E. DUBIA (*Photinia dubia*, Lindl. in Trans. Linn. Soc. XIII. 104. t. 10; DC. Prod. II. 631; Wenzig in Linn. 1874. 94; *Mespilus Bengalensis*, Roxb. Fl. Ind. II. 510; *Photinia Bengalensis*, Wall. ap. Voigt Hort. Calc. 198 excl. syn. Ldl.).

HAB. Frequent in the damp hill-forests of the Martaban Hills, east of Tounghoo, at 6000 to 7000 feet elevation; Ava Hills, east of Bhamo (J. Anderson); Chittagong (Roxb.).—Fl. March.

*4. E. JAPONICA, Lindl. in Trans. Linn. Soc. XIII. 103; WA. Prod. I. 302; Wight Icon. t. 226; Sieb. and Zucc. Fl. Jap. I. 182. t. 97; Wenzig in Linn. 1874. 97.—(*Mespilus Japonica* Thbg. Fl. Jap. 205; Vent. Jard. Malm. I. t. 19; Bot. Reg. t. 365; Roxb. Fl. Ind. II. 510).

HAB. The 'loquat' is but rarely cultivated in the larger towns of Pegu, such as Rangoon.

Rosa, L.

Conspectus of Species.

Sect. 1. *Systylæ*. Styles connate into a column. Flowers in corymbs.

Flowers small, pink; calyx glabrous or pubescent, the lobes short and entire; leaflets small, pubescent beneath; stipules pinnatifid, *R. multiflora*.

Flowers large, white; calyx glandular-tomentose, one or more of the lobes usually lobed; leaflets glabrous; stipules entire, *R. moschata*.

Sect. 2. *Eleuterostylæ*.—Styles all free.

* *Calyx-throat pervious and not closed by the disk.*

Flowers large, usually corymbose; calyx glabrous or sparingly glandular; leaflets glabrous, glaucous beneath; carpels about 40 to 50, *R. Indica*.

As preceding, but leaves solitary; carpels about 15, *R. damascena*.

Leaflets small; flowers solitary; calyx-tube and the globular fruits densely echinate, *R. microphylla*.

* * *Calyx-throat completely closed by the disk.*

Calyx, younger branchlets, and the globular fruits densely tomentose; flowers white,

..... *R. involuerata*.

Leaflets wrinkled, opaque; calyx and peduncles hispid, *R. rubiginosa*.

1. R. INVOLUCRATA, Roxb. ap. Lindl. Monogr. Ros. 8; Roxb. Fl. Ind. II. 513; DC. Prod. II. 602; Bot. Reg. t. 739; Wight Icon. t. 234.

HAB. Ava, Irrawaddi plains from Mandalay northwards, in savannahs.—Fl. Jan. Febr.

NB. Several species of roses (especially *R. Indica* and *R. damascena*) are found planted, around khyoungs chiefly, in almost every one of the larger villages of Pegu.

Rubus, L.

Conspectus of Species.

* Carpels few, only 3—6. Leaves simple.

Petioles very short; flowers in large terminal panicles, *R. pyrifolius*.

* * Carpels numerous, forming a sort of sappy berry.

× Leaves entire or lobed.

+ All softer parts and the uunderside of the lobed leaves covered with a dense tomentum usually intermixed with longer hairs. Calyx-lobes entire.

Bracts and stipules entire or subulate-toothed, sometimes very deeply so and in this case the lobes short, *R. rugosus*.

Bracts and stipules pinnately cut, the segments long, thin, and often filiform, .. *R. Moluccanus*.

+ + All parts, except the inflorescence, without tomentum, rather glabrous or pubescent.

Calyx-lobes pectinate-toothed, *R. ferox*.

× × Leaves digitately 3—5-foliolate.

Branchlets almost terete; leaflets green, shortly puberulous; stipules and bracts linear, entire, shortly glandular-pubescent; flowers white, *R. pentagonus*.

Branchlets terete; leaflets glabrous or pubescent; stipules and bracts usually cut into 1—2 linear segments, glabrous or only very sparingly and shortly glandular-hairy; flowers red, *R. alpestris*.

× × × Leaves pinnately 3-foliolate or unpaired-pinnate.

O Fruits tomentose.

Leaves unpaired pinnate, the leaflets beneath white or yellowish tomentose; flowers white, *R. lasiocarpus*.

O O Fruits glabrous.

Leaves pinnately 3-foliolate, the leaflets white or yellowish tomentose beneath; petals white, *R. flavus*.

Leaves unpaired-pinnate, uniformly green; petals white, *R. rosaefolius*.

1. *R. PYRIFOLIUS*, Sm. Icon. Ined. fasc. III. 61; DC. Prod. II. 567; Miq. Fl. Ind. Bat I/1. 384. (*R. hexagynus*, Roxb. Fl. Ind. II. 516; WA. Prod. I. 299; *R. Indicus*, Lesch. in DC. Prod. II. 568).

HAB. Hills of Ava.—Fl. March.

2. *R. MOLUCCANUS*, L. sp. pl. 707; DC. Prod. II. 566; Miq. Fl. Ind. I/1. 382; Bth. Fl. Austr. II. 439.—(*R. Moluccus latifolius*, Rumph. Herb. Amb. V. 78. t. 47. f. 2.)

VAR. *α*. GENUINUS, leaves beneath clothed with a short tomentum intermixed with a few longer hairs only, the basal lobes usually diverging; calyx velvety and at the same time densely tawny and appressedly hirsute, the lobes acuminate.

Var. *β*. ALCEÆFOLIUS (*R. alceæfolius*, Poir. Encycl. Suppl. VI. 247; DC. Prod. II. 567; Miq. Fl. Ind. Bat. I/1 379), leaves softly pubescent beneath, the basal lobes usually much converging; calyx densely tawny or yellowish appressed hirsute, the lobes acuminate.

? Var. γ . ABNORMALIS, stems covered with spreading tawny hairs; leaves of var. α .; calyx shortly and densely greyish or whitish tomentose without any admixture of longer hairs, the lobes acute or almost blunt.

HAB. Var. α ., often passing into β ., frequent on the Martaban Hills, as well in the drier hill-forests as in hill-toungyas and deserted cultivated lands, from 2500 to 7000 feet elevation; var. γ . Burma probably Ava (Griff. 2147).—Fl. Febr. March.

3. R. FEROX, Wall. Cat. 724; Focke in Abhandl. Nat. Ver. Bremen IV. 196. (*R. Moluccanus*, Roxb. Fl. Ind. II. 518 et ejusd. Icon. MS. IX. t. 32. f. 1853).

HAB. Burma, probably Ava (Griff. 2145).

4. R. PENTAGONUS, Wall. Cat. 731; Focke in Abh. Nat. Ver. Brem. IV. 192).

HAB. Not uncommon in the damp hill-forests along hill-streams, on the Nattoung mountain, east of Tounghoo, at 6000—7000 feet elevation.—Fl. March.

I formerly combined *R. alpestris* and this species, but Mr. O. Kuntze of Leipzig, who revised the species of *Rubus* in HBC., has pointed out to me the differences between the two.

5. R. LASIOCARPUS, Sm. in Rees. Cycl. XXX. ; DC. Prod. II. 558; WA. Prod. I. 699; Wight Icon. t. 232. (*R. albescens* and *R. racemosus*, Roxb. Fl. Ind. II. 519; *R. Mysorensis*, Heyne in Roth Nov. sp. 235; DC. l. c. 557; *R. Horsfieldii*, Miq. Fl. Ind. Bat. I/1. 375. t. 7).

HAB. Ava, hills east of Bhamo (J. Anderson); Karenee country (O'Riley).

6. R. FLAVUS, Ham. ap. Don. Prod. Nep. 234; DC. Prod. II. 559.—(*R. Gouvreophul*, Roxb. Fl. Ind. II. 517; WA. Prod. I. 298; Wight Icon. t. 231).

HAB. Hills of Ava, Taong dong (Wall.) ; Kakhyen Hills (J. Anderson); Martaban Hills, east of Tounghoo (Rev. F. Mason).—Fl. Febr. March.

7. R. ROSÆFOLIUS, Sm. Icon. in ed. III. 60. t. 60; DC. Prod. II. 556; Miq. Fl. Ind. Bat. I/1. 375; Bot. Mag. t. 1783 c. fl. plen.; Hook. Icon. Pl. t. 349; Lodd. Bot. Cab. t. 158; Bth. Fl. Austr. II. 431. (*R. rosaeiflorus*, Roxb. Fl. Ind. II. 519).

Var. α . ASPER (*R. asper*, Don. Prod. Nep. 234), stem, branches, and petioles more prickly and covered with long stiff blackish gland-hairs; calyx and peduncle tomentose-pubescent, with long spreading gland-bristles; leaves more or less appressed hairy; flowers usually in poor corymbs.

Var. β . GLABRIUSCULUS, stems, branches, and petioles glabrous or with few short gland-hairs only; peduncles and pedicels usually shortly glandular-pubescent, rarely almost glabrous; calyx glabrous or sprinkled

with few short gland-hairs, velvety-tomentose inside ; leaves more glabrous ; flowers much larger, usually solitary on leaf-opposed long pedicels.

HAB. Var. α . Rather frequent in the hill-forests of Martaban, at 3000—4000 feet elevation, freely springing up in hill-toungyas ; var. β . Ava Hills, especially those east of Bhamo.—Fl. Apr.

The above two forms are probably better treated as separate species, The branches are more or less terete or angular.

Fragaria, L.

1. F. INDICA, Andr. Bot. Rep. t. 475 ; Bot. Reg. t. 61 ; DC. Prod. II. 571 ; WA. Prod. I. 300 ; Wight Icon. t. 989. (*Fragaria Malayana*, Roxb. Fl. Ind. II. 520 ; *Duchesnea fragarioides*, Sm. in Trans. Linn. Soc. X. 373 ; Miq. Fl. Ind. Bat. I. 372).

HAB. Ava, Bhamo and Tapeng valley (J. Anderson) ; Chittagong, Comilla (C. B. Clarke).—Fl. Fr. Febr. March.

Potentilla, L.

1. P. KLEINIANA, WA. Prod. I. 300 ; Wight Ill. t. 85. (*Duchesnea Sundaica*, Miq. Fl. Ind. Bat. I/2. 372. t. 6).

HAB. Ava, Khakyen Hills, Ponsee (J. Anderson).—Fl. Fr. March.

SAXIFRAGÆÆ.

Conspectus of Genera.

Trib. 1. *Saxifragææ*.—Herbs, often scapigerous. Leaves alternate. Stipules none. Flowers 5-merous. Ovary 1—3-celled.

ASTILBE.—Petals 5 or none. Stamens 8 or 10. Carpels nearly free. Herbs with ternatisect leaves. Flowers paniced.

Trib. 2. *Hydrangeææ*.—Trees or shrubs. Leaves opposite. Stipules none. Petals often valvate. Stamens usually epigynous. Ovary usually 3—5-celled.

DICHROA.—Petals 5 or 6, valvate. Styles 3—5, club-shaped. Fruit a berry.

Trib. 3. *Escalloniææ*.—Trees or shrubs. Leaves alternate. Stipules none. Stamens usually as many as petals.

ITEA.—Ovary half-superior, 2-celled. Style separable into two. Capsule superior, 2-beaked.

POLYOSMA.—Ovary inferior, 1-celled. Style simple. Fruit a 1-seeded berry.

Polyosma, Bl.

1. P. WALLICHII, Benn. Pl. Jav. rar. 196 ; Hf. and Th. in Linn. Proc. II. 77.

HAB. Tropical forests of the Andamans, not rare.—Fl. RS.

Very near to *P. ilicifolia*, Bl., but the flowers are smaller and the fruits different.

CRASSULACEÆ.

Conspectus of Genera.

BRYOPHYLLUM.—Calyx large, inflated, shortly 4-cleft.

KALANCHOE.—Calyx 4-parted.

Bryophyllum, Salisb.

1. *B. PINNATUM* (*Kalanchoe pinnata*, Pers. Ench. I. 446; Miq. Fl. Ind. Bat. I/1. 728; *B. calycinum*, Salisb. Parad. Lond. t. 3; DC. Prod. III. 396; WA. Prod. I. 360; Wight. Ill. Ind. Bot. Suppl. 55. t. 31; Bot. Mag. t. 1409; *Cotyledon pinnata*, Lam. Encycl. Meth. II. 141 (1786); *Cotyledon rhizophylla*, Roxb. Fl. Ind. II. 456; *Colydedon calycina*, Roth Nov. sp. 217).

HAB. Frequent in rubbishy or waste places, ruins, etc., chiefly around villages, all over Burma and the adjacent provinces. Fl. Jan. Febr.

Kalanchoe, Adans.*Conspectus of Species.*

× Panicles glandular-puberulous.

Leaves pinnatifid, the lobes flattened, lobed or cut, *K. laciniata*.

× × Panicles quite glabrous.

Leaves simple or pinnately 3-foliolate, crenate, *K. acutiflora*.

Leaves pedately 3-pinnatisect, the segments almost terete, sulcate, *K. teretifolia*.

1. *K. LACINIATA*, DC. Pl. grass. t. 100 and Prod. III. 395; WA. Prod. I. 360; Wight Icon. t. 1158.—(*Cotyledon laciniata*, L. sp. pl. 615; Roxb. Fl. Ind. II. 456).

HAB. Ava, Irrawaddi valley (J. Anderson).

2. *K. ACUTIFLORA*, Haw. Syn. 109; Bot. Rep. t. 560; Miq. Fl. Ind. Bat. I. 728. (*K. varians*, Wall. Pl. As. Soc. rar. II. 53. t. 167 sub. nom. *K. subamplectens*, non Haw.; Hf. and Thoms. in Linn. Proceed. II. 91, quoad specim. Birmanica).

HAB. Not unfrequent in uncultivated places along the Irrawaddi in Ava.—Fl. Jan.

3. *K. TERETIFOLIA*, Haw. in Wall. Pl. As. rar. II. 53. t. 166; Hf. and Th. in Linn. Proc. II. 91.

HAB. Pegu, near Rangoon? (*teste* Wallich); Ava, Taong dong (Wall.).—Fl. Jan.

DROSERACEÆ.

Conspectus of Genera.

DROSERA.—Stamens 4—8. Styles 2—5, simple, 2-parted, or many-cleft. Ovary 1-celled. Glandular-pilose herbs, scapiferous or not.

ALDROVANDA.—Stamens 5. Styles 5, filiform. Ovary 1-celled. Glabrous, floating herbs with whorled leaves.

Drosera, L.*Conspectus of Species.*

× Leaves radical or nearly so, rosulate. Scapes leafless.

Leaves obovate-spathulate; flowers white or pale rose, *D. Burmanni*.

× × Leaves scattered. Scapes leafy.

Leaves linear ; flowers purple, *D. Indica*.
Leaves peltate, half-orbicular or crescent-shaped ; flowers white, *D. peltata*.

1. *D. BURMANNI*, Vhl. Symb. III. 50 ; Wight Ill. t. 20, excl. stigma ;
Wight Icon. t. 944 ; Planch. in Ann. d. sc. nat. ser. 3. IX. 190 ; Hf. and
Th. in Linn. Proc. II. 82.

HAB. Chittagong (Hf. and Th.) ; very rare in grass-lands in the
eng-forests of the Prome district.—Fl. March.

2. *D. INDICA*, L. Fl. Zeyl. 51 ; Wight Ill. t. 20 ; Planch. in Ann. d.
sc. nat. 3 ser. IX. 204 ; Hf. and Th. in Linn. Proc. II. 82.

HAB. Not unfrequent in wet short-grassed pastures and swamps of
of the diluvial lands of Southern Pegu, chiefly about Rangoon, etc. ; Tenas-
serim, Tavoy (Wall).—Fl. Aug.—Decemb.

3. *D. PELTATA*, Sm. Exot. Bot. I. 79. t. 41 ; Planch. in Ann. d. sc.
nat. 3 ser. IX. 296 ; DC. Prod. I. 319 ; Bth. Fl. Austr. II. 465 ; WA.
Prod. I. 34 ; Wight Illust. t. 20.—(*D. lunata*, Ham. in DC. Prod. I. 319 ;
Hook. Icon. t. 54 ; Planch. in Ann. d. sc. nat. 3 ser. IX. 296 ; Hf. and Th.
in Linn. Proc. II. 82 ; *D. Lobbiana*, Turcz. in Bull. d. Nat. Mosc. 1854. 343).

HAB. Not unfrequent on laterite grounds in the hill-eng-forests, from
Martaban down to Upper Tenasserim, at 1500 to 3000 feet elevation ; also
in boggy places on the top of the Nattoung, east of Tounghoo, at about
7100 feet elevation.—Fr. March Ap.

HAMAMELIDEÆ.

Conspectus of Genera.

BUCKLANDIA.—Flowers in heads, polygamous. Petals of male flowers linear. Filaments
elongate. Evergreen trees, the stipules large, deciduous.

ALTINGIA.—Flowers in 1-bracted heads, unisexual. Stamens in male flowers head-
like clustered. Petals none. Leaf-shedding trees. Stipules small.

Bucklandia, R.Br.

1. *B. POPULNEA*, R.Br. in Wall. Cat. 7414 ; Griff. in Asiat. Research.
XIX. 94. t. 13 and 14 ; Miq. Fl. Ind. Bat. I/1. 836.—(*Liquidambar tricus-*
pis, Miq. l. c. 1097 and Suppl. Fl. Sum. 346. t. 4.)

HAB. Frequent in the damp hill and the stunted forests of the Mar-
taban Hills, east of Tounghoo, at 4000 to 7200 feet elevation.—Fl. March.

Altingia, Noronh.

1. *A. EXCELSA*, Noronh. Verh. Bat. Genootsch. V. 1-20. (*Liquidam-*
bar Altingia, Bl. Fl. Jav. Balsamifl. 8. t. 1—2 ; Miq. Ind. Bat. I/1. 836 ;
Sedgwickia cerasifolia, Griff. in Asiat. Research. XIX. 98. t. 15—16).

HAB. Ava, Khakyen Hills, east of Bhamo (J. Anderson) ; Tenas-
serim, locally (as along the Nanta-yoke choung) quite abundant (Rev.
F. Mason).—Fr. March.

(To be continued.)